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# Development of the Automated Instructional Management System Data Set of the Officer Longitudinal Research Data Base

January 1989

Leadership and Motivation Technical Area
Training Research Laboratory

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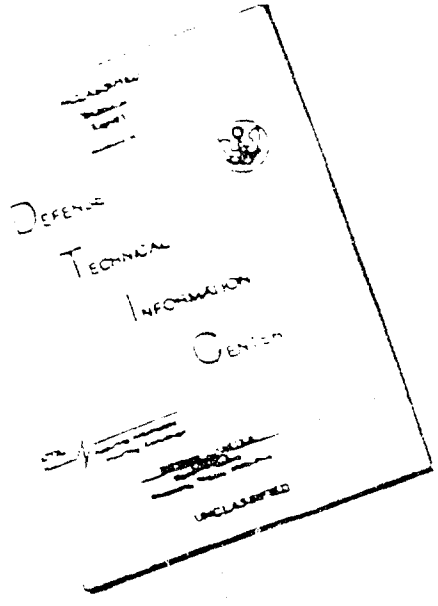


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**EDGAR M. JOHNSON**
**Technical Director**

**JON W. BLADES**
**COL, IN**
**Commanding**

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Fu Associates, Ltd.

Technical review by

James Hendricks
Hyder A. Lakhani

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The Officer Longitudinal Research Data Base (OLRDB) was developed to support research on U.S. Army commissioned officers. The Automated Instructional Management System (AIMS) Data Set of the OLRDB provides data on officers' performance in training courses conducted at Training and Doctrine Command (TRADOC) service schools and training centers. Data were collected from 11 TRADOC schools on officer performance in Officer Candidate School courses and in Officer Basic and Advanced courses for 13 career fields for 1985, 1986, and 1987. This report describes the contents and development of the OLRDB AIMS data set.

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# Development of the Automated Instructional Management System Data Set of the Officer Longitudinal Research Data Base

**Lori J. Ramsey and Dianne D. Younkman**
Fu Associates, Ltd.

**for**

**Contracting Officer's Representative**
**Trueman R. Tremble, Jr.**

**Leadership and Motivation Technical Area**
**Robert F. Holz, Chief**

**Training Research Laboratory**
**Jack H. Hiller, Director**

U.S. Army Research Institute for the Behavioral and Social Sciences
5001 Eisenhower Avenue, Alexandria, Virginia 22333-5600

Office, Deputy Chief of Staff for Personnel
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FOREWORD

The Leadership and Motivation Technical Area of the U.S. Army Research Institute (ARI) conducts programmatic research to improve leader effectiveness, with a focus on the sequential, progressive development of leaders. To support this and other research, ARI has developed an Officer Longitudinal Research Data Base (OLRDB) with an online User's Manual and Data Dictionary. The data base enables researchers to produce data-based information on the training, professional development, and utilization of U.S. Army commissioned officers.

This report describes the procedures used to develop the Automated Instructional Management System (AIMS) Data Set of the OLRDB. This data set contains information on the performance of officers in training courses conducted at the Training and Doctrine Command (TRADOC) service schools and training centers. The course work includes Officer Candidate School courses as well as post-commissioning performance data from 13 career fields. The inclusion of these data in the OLRDB allows researchers to study officer development and utilization.

The development of the OLRDB has been briefed to the research sponsor, the Center for Army Leadership (29 April 1987), which recognizes its role as a research tool to generate information necessary for systematically enhancing leader training and effectiveness.

EDGAR M. JOHNSON
Technical Director

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DEVELOPMENT OF THE AUTOMATED INSTRUCTIONAL MANAGEMENT SYSTEM DATA SET OF THE OFFICER LONGITUDINAL RESEARCH DATA BASE

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# DEVELOPMENT OF THE AUTOMATED INSTRUCTIONAL MANAGEMENT SYSTEM DATA SET OF THE OFFICER LONGITUDINAL RESEARCH DATA BASE

## BACKGROUND

The Officer Longitudinal Research Data Base (OLRDB) was conceived by the Army Research Institute (ARI) to make readily available longitudinal data for current and future research efforts regarding U.S. Army officers. Several components of the OLRDB have already been established. These include a core data set containing critical information about former and current active duty officers (Younkman, 1987); Reserve Officer Training Corps (ROTC) (Younkman, 1987) and United States Military Academy (USMA) data sets containing precommission data; and thirteen sets of Officer Master File (OMF) data on such selected career history variables as assignments, education, and awards.

Post-commissioning performance data are essential for research on officer development and utilization. The Automated Instructional Management System (AIMS) maintained at Training and Doctrine Command (TRADOC) service schools and training centers is a source for post-commissioning data on performance in training. This report describes the steps taken to incorporate the TRADOC AIMS data into an OLRDB data set. This report also describes the structure and content of the OLRDB AIMS Data Set.

At the development of the OLRDB AIMS Data Set, 11 of the 23 TRADOC AIMS sites captured the data of interest on commissioned officers. This included (1) summary grades of performance in training courses and other events at the TRADOC schools and (2) personal identifying information necessary for linking AIMS data with other OLRDB data. Information on officer performance in four types of courses was selected for incorporation into the OLRDB: Officer Candidate School courses, Officer Basic Courses, Officer Advanced Courses, and Technical Courses.

The OLRDB AIMS Data Set integrates data on post-commissioning training performance with other OLRDB data on personnel qualifications, career histories, and precommissioning training. Thus, the OLRDB AIMS Data Set can play an important role in research on the nature of and the ability to generalize relationships among precommissioning variables, training achievements or performance, officer development, and advancement and retention.

## OBJECTIVE

The objective of this work was to incorporate AIMS data into a data set that would be compatible with the OLRDB core data set. Using AIMS data and associated documentation provided by ARI, the following research tasks were to be accomplished:

1. Verify the accuracy and correctness of the AIMS variables selected for incorporation into the OLRDB, within the bounds of available data, documentation, and logic.

2. Protect the privacy of individual records by using an encryption procedure applied to all OLRDB data sets to encode personal identifying information.

3. Create a Statistical Analysis System (SAS) data set containing cases across school sites and variables common to all sites.

4. Develop detailed descriptions of all variables in the SAS data set and enter them into the OLRDB data dictionary (Hunter, 1987). The data dictionary was to be created on the ARI VAX system in the format used for all OLRDB data dictionaries.

## PROCEDURES

AIMS data on training course years 1985 through 1987 were received from 11 TRADOC sites. Processing these data according to the research tasks involved the following steps:

1. Design the OLRDB AIMS Data Set.
2. Identify AIMS data elements to be retained.
3. Identify AIMS data elements to be derived.
4. Extract course data and merge sites together.
5. Edit the data elements.
6. Create the final OLRDB AIMS Data Set.
7. Encrypt the personal identifying information.
8. Create the OLRDB AIMS Data Set Data Dictionary.

## Design the OLRDB AIMS Data Set

The data set was designed to provide (1) a capability for research on officer training performance across all TRADOC training sites and in relationship with other (OLRDB) data and (2) a data set structure that would be affordable to update with future training performance data.

The TRADOC AIMS data describe performance in specific courses. Each course can consist of multiple events or course components. The course average denotes the officer's training performance for the overall course; however, each event within a course may also be graded. To utilize the data for the OLRDB, development of two SAS data sets was initially considered. One data set would be longitudinal, consisting of one record per officer. This data set would contain summary course level information. The second data set would be a more detailed file containing event level data with multiple records per student, one record per course event.

Examination of the data and their documentation indicated that summary course information could be extracted for reliable entry into the OLRDB. However, it was found that subject matter expertise in all career fields covered by the TRADOC sites would be required for accurate identification, codification, and extraction of data on performance in the events comprising the TRADOC courses. This expertise would also be necessary for the future updating or maintenance of event data, given the likelihood of changes in course contents. It was determined that due to such resource requirements, performance data on course events would not be included in the OLRDB AIMS Data Set.

The exclusion of event information prompted the redesign of the data base. The new design retained only course level information. There would be only one record per officer with all courses summarized on the single record. Each course was classified as Officer Candidate School (OCS), Officer Basic Course (OBC), Officer Advanced Course (OAC), or Technical Course (TC).

It was necessary to determine how many of each type of course was likely to occur for an officer so that the data set could be designed with the appropriate number of segments to handle the course data. Tests were run on the AIMS data to determine the frequency of training by course type. These tests showed that no student took more that one OCS course, two OBC courses, two OAC courses, or two TCs. Based on this information, the data set was designed to provide space for one OCS course, two OBC courses, two OAC courses, and four TCs per officer.

## Identify AIMS Data Elements to be Retained

Appendix A contains the data elements and descriptions provided by the TRADOC AIMS sites. Original data elements for identification of individual records/officers were retained for the OLRDB AIMS Data Set. These were the social security number (later encrypted) and rank of the officer while attending a course. In addition, original elements were retained describing the course performance of an officer: a code for the course, the class number and year of the course, and the final course average for the officer in the course.

The selection of fields to be kept in the data set was finalized after the various data elements had been checked for accuracy and edited. Refer to the section in this report, Summary of the OLRDB AIMS Data Set, for a list of all data elements for each course.

## Identify AIMS Data Elements to be Derived

New data elements were also created for the OLRDB AIMS Data Set to enhance the usefulness of the data. These were the site code, class size, Army standard score, and course repeat flag. Each of these data elements was derived from the data received from each site.

The site code is a two-character field assigned to each input record to identify the school site from which the data originated. This field gives researchers the ability to analyze the data of a specific school after the sites have been merged into one AIMS file.

The number of students in a class as recorded by the AIMS sites includes all students in the class, to include allied officers and civilians. For the OLRDB AIMS Data Set, a new class size variable was created to represent the number of all U.S. Army commissioned officers who were both in the class and included in the final OLRDB AIMS Data Set.

Research using the OLRDB could involve comparison of officer scores across school sites. To allow this, an Army Standard Score was calculated by class from the course average found in the site data. The SAS PROC STANDARD (SAS Institute Inc., 1985) was used to transform the course averages into Army Standard Scores with a mean of 100 and a standard deviation of 20.

A course repeat flag was created to indicate whether a student had taken a course more than once. For this flag, a repeat code of "1" indicates that a course has not been repeated; a code of "2" signifies that a student has taken the course more than once. If a student had repeated a course, the course record with the higher class number was retained and served as the input for all other OLRDB AIMS data on an officer. The class number variable signifies the class and the year the course was taken.

The course repeat flag alerts researchers to the fact that a course was taken more than once, so they can use this knowledge in analysis of training performance of the student.

## Extract Course Data and Merge Sites Together

The 11 TRADOC school sites were processed individually in the initial stages of data set development (see Figure 1). The event records were dropped from each school site in the early stages of data base development to eliminate further processing of unwanted data. Information on the courses selected for inclusion in the OLRDB AIMS Data Set was then extracted from the data sets. Data did not exist in the initial training site data for all the courses that were selected for extraction. Appendix B contains a list of courses extracted from the site data. The selected courses encompass 13 career fields including: Infantry, Signal Corp, Air Defense Artillery, Armor, Military Intelligence, Chemical, Military Police, Ordnance, Engineer, Quartermaster, Adjutant General, Finance, and Field Artillery.

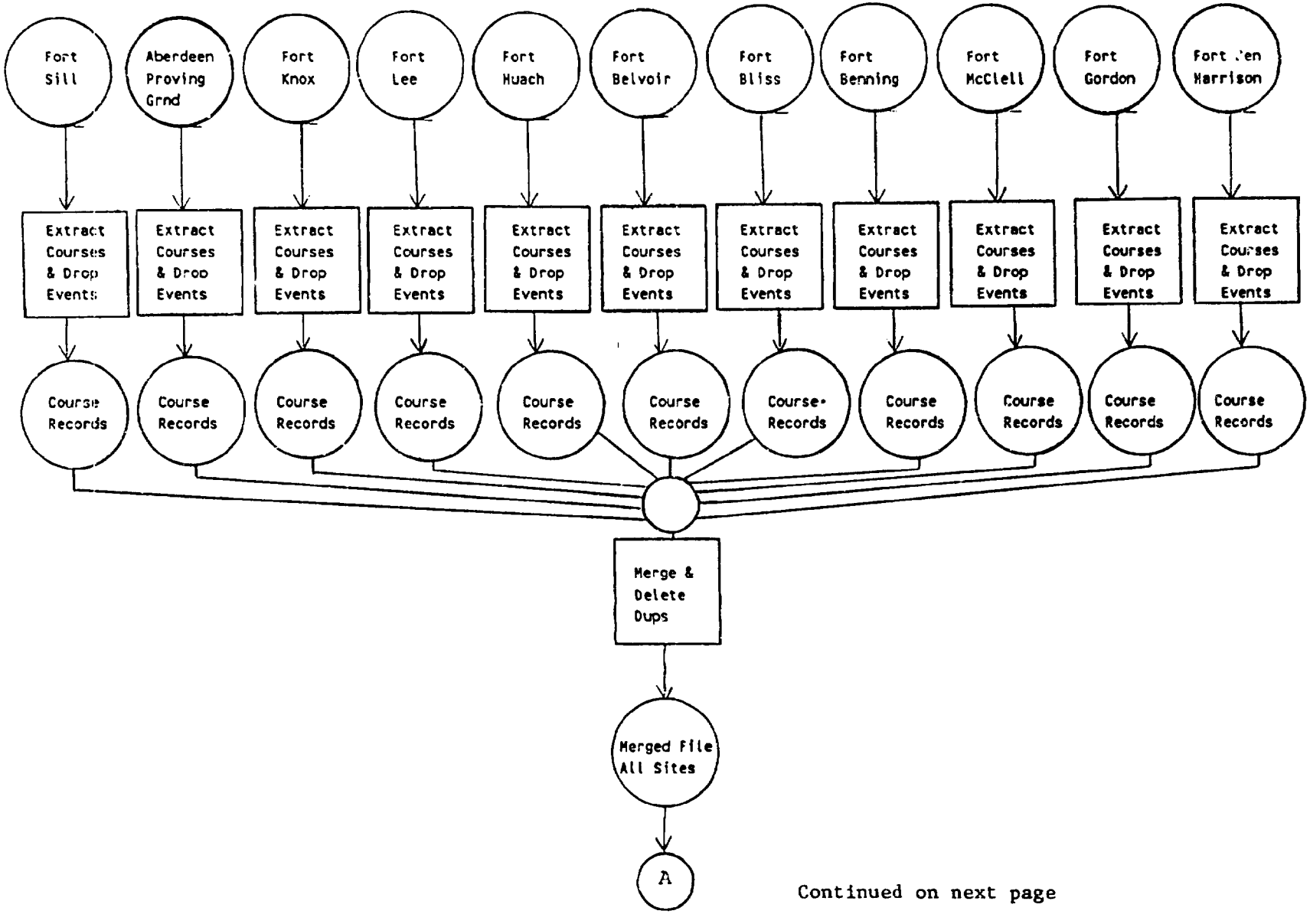
Once the selected records needed for the OLRDB AIMS Data Set were extracted, the data from the 11 TRADOC sites were merged together. This procedure also deleted duplicate and blank records from the merged file. Duplicates can appear in later submissions of data from a site, depending on the date range of the AIMS data processed at the site. This processing step was designed to allow new data to be added to the merged file without duplication between the new and old data from a site.

## Edit the Data Elements

The data were assessed to insure that the final OLRDB AIMS data were accurate and included only Army officers. To eliminate nonofficer records, the rank variable was examined. This data field appeared to be reliable with only a small percentage of cases having miscoded or unrecognizable ranks. Obvious data entry errors for rank were either recoded to the correct rank or coded as missing. Those records containing ranks that were clearly not related to officer ranks were dropped from the data set. All records regardless of military rank were kept under the Officer Candidate School courses. Appendix C contains a chart describing the conversion criteria used to edit rank.

One additional edit used the student type field to eliminate nonofficer records. Those records having a valid officer rank but a nonofficer code for student type (03 through 08) were matched against the Officer Master File by social security number to determine if they were valid officer records. If no match occurred, the records were dropped from the data base.

Figure 1. OLRDB AIMS Data Set Development.

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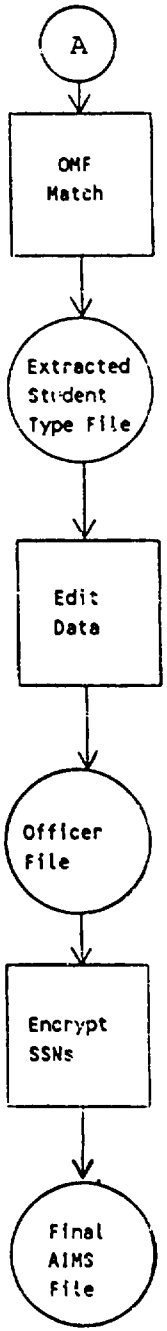


To avoid misinterpretation, course performance scores were set to missing values if they were out of range (i.e., over 100) or if the course average was the same for all students in a class. Also, the course average for some students was found to be zero, indicating that the student was most likely sitting in on the class or was unable to complete the class. These records were dropped from the data set so that the final OLRDB AIMS Data Set would contain only completed course data.

Various other data variables were edited based on SAS frequencies of each field. For example, the class number and year field were occasionally found to contain data entered in reversed order. These cases were corrected in the edit program. Finally, courses repeated by an officer were edited so that only the most recent course was kept on the data set. In these instances, the course repeat flag was set to indicate that other occurrences of this course had been dropped for this officer.

## Create the Final OLRDB AIMS Data Set

The course codes and related course information fields were categorized into OCS, OAC, OBC, and TC types. The course records were then combined into one record per officer with the data elements assigned to their designated course type fields. SAS formats were assigned and were entered into the OLRDB format library.

## Encrypt the Personal Identifying Information

The social security number was the only data element that contained personal identifying information in the OLRDB AIMS Data Set. To protect the privacy of an individual in the data set, their social security number was replaced with a unique identification number, the matchcode. This encryption was performed using procedures developed for the OLRDB. This also ensures that the OLRDB AIMS Data Set can be cross referenced to other OLRDB data sets by a common variable.

## Create the OLRDB AIMS Data Set Data Dictionary

The OLRDB Data Dictionary on the ARI VAX system (Hunter, 1987) contains information for guiding researchers in the selection and use of data in the OLRDB. The dictionary was updated to describe and guide use of the OLRDB AIMS Data Set. The AIMS Data Dictionary contains information on each of the data elements, codes for the data elements, and a description of the data set. The AIMS dictionary information is listed under the data set name of AIMS. To develop the Data Dictionary, a variable table, a description table, and a code table were created.

The variable table contains the necessary information to access the OLRDB AIMS Data Set. The table supplies the tape number, the data set name of the tape, and the SAS data set name. In addition, it contains the data elements with the SAS format names, and brief data element descriptions. The variable table can also be used for general background information which describes the contents and purpose of the data set. This information is useful for obtaining details of the data set such as the data set structure, the years covered by the data, the school sites included, and the course type categories selected.

The description table can be accessed to find the data elements that are contained in the OLRDB AIMS Data Set. This table gives a complete list of the variables in the data set. It also helps in interpreting the data by including a detailed definition for each data element in the data set.

The codes table can be referenced to obtain the codes for a data element and the definition of the codes. This table gives the user the capability of performing data analysis based on the code values. This table can be used in conjunction with the variable and description tables to look at the variables in the data set in greater detail. See Appendix D for the data dictionary variables.

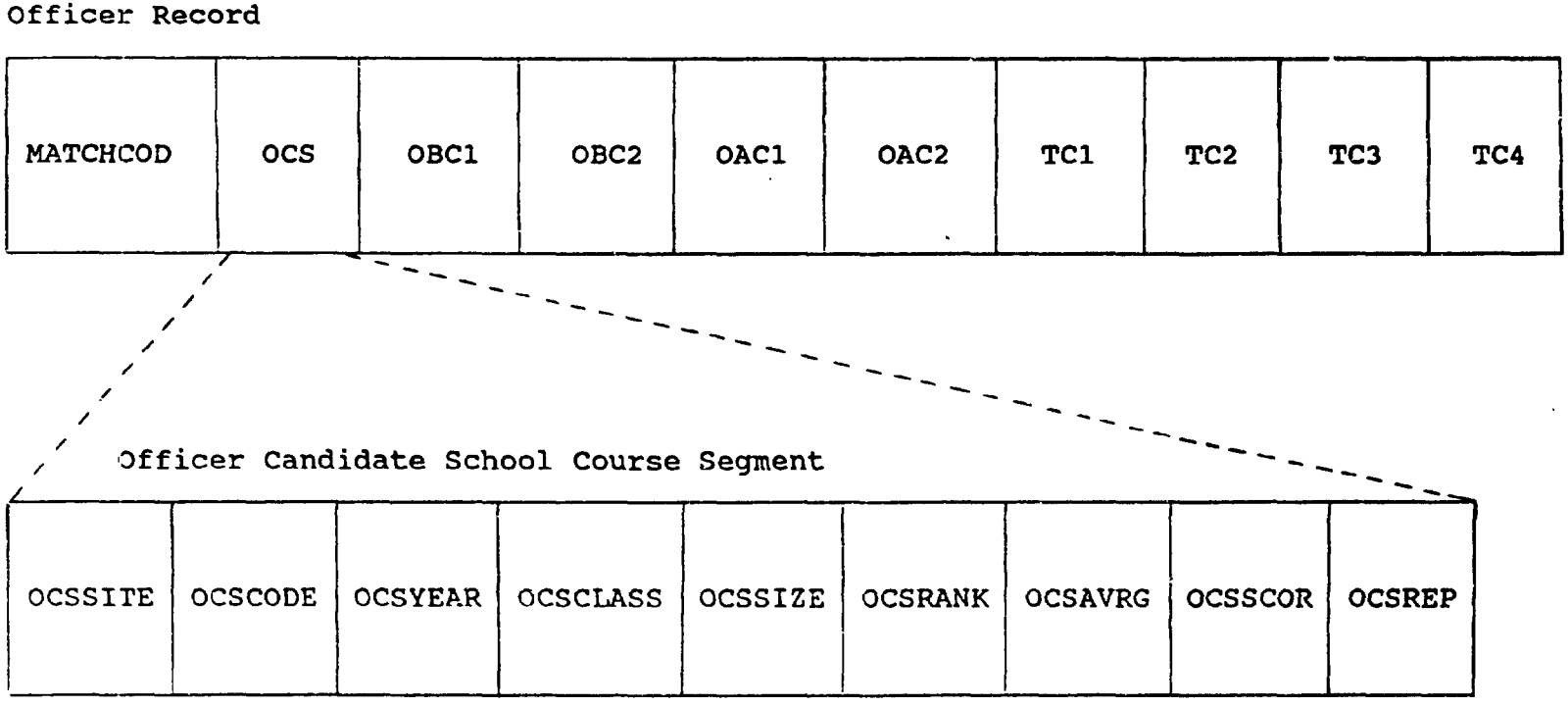
## SUMMARY OF THE OLRDB AIMS DATA SET

The OLRDB AIMS Data Set was created to augment the OLRDB with data on post-commissioning and OCS training performance for use in research on the development and utilization of U.S. Army commissioned officers. It is compatible with the other data sets of the OLRDB and is fully documented in the OLRDB Data Dictionary on the ARI VAX computer system. The OLRDB AIMS Data Set is a Statistical Analysis System (SAS) data set which provides the informational and functional capabilities to support a wide range of research applications. Appendix E contains all procedures for development of the OLRDB Aims Data Set using data provided by the TRADOC AIMS sites.

The OLRDB AIMS Data Set contains data on 21,113 commissioned officers, with one record per officer (see Figure 2). Each officer is identified in the data set by a matchcode, which is an encryption of the officer's SSN for protection in accordance with privacy regulations. Other data for each officer are based on a maximum of nine TRADOC courses: one Officer Candidate School (OCS) course, two Officer Basic Courses (OBCs), two Officer Advanced Courses (OACs), and four Technical Courses (TCs).

As Figure 2 shows, the data for each course taken by an officer consist of course identifying information as well as performance data. The specific data for each OCS, OBC, OAC, and TC course are as follows:

Figure 2. OLRDB AIMS Data Set Record Layout.




OCS - Officer Candidate School
OBC - Officer Basic Course
OAC - Officer Advanced Course
TC - Technical Course

| Data Element | Description/Codes |
|---|---|
| Site Code | Location (TRADOC post) where the course was taken |
| Course Code | AIMS course code consisting of a four-character Training and Doctrine Command (TRADOC) Educational Data System (TREDS) course number. See Appendix B for list of course codes. |
| Class Year | Year of class attended |
| Class Number | A number identifying a particular class of a course within a given fiscal year |
| Class Size | Number of students in the class in the OLRDB AIMS Data Set |
| Rank | Military rank<br>1LT - 1st Lieutenant<br>2LT - 2nd Lieutenant<br>CPT - Captain<br>MAJ - Major<br>LTC - Lieutenant Colonel<br>COL - Colonel<br>B G - Brigadier General<br>M G - Major General<br>LTG - Lieutenant General<br>GEN - General<br>G A - General of the Army<br>PV1 - Private<br>PV2 - Private<br>PVT1 - Private<br>PVT2 - Private<br>PFC - Private 1st Class<br>CPL - Corporal<br>SGT - Sergeant<br>SFC - Sergeant 1st Class<br>SSG - Staff Sergeant<br>MSG - Master Sergeant<br>SGM - Sergeant Major<br>CSG - Command Sergeant Major<br>W01 - Warrant Officer 1<br>CW2 - Chief Warrant 2<br>CW3 - Chief Warrant 3<br>CW4 - Chief Warrant 4<br>SP4 - Specialist 4<br>SP5 - Specialist 5<br>SP6 - Specialist 6<br>SP7 - Specialist 7 |

| | |
|---|---|
| Course Average | Student's final average in course 0-100 |
| Army Standard Score | Derived from a student's course average using a mean of 100 and standard deviation of 20 |
| Course Repeat Flag | Course repeated by a student indicator 1 - course not repeated 2 - course repeated |

A complete description of these variables can be found in Appendix D for each course possibly covered for an officer.

Table 1 shows the number of students with training data in each of the course type categories. Table 2 depicts the number of students by military rank in each of the course type categories. These data generally cover class years 1985 through 1987. The class years covered in the OLRDB AIMS Data Set for each TRADOC site depend on when AIMS was implemented at the site. Each TRADOC site is also responsible for the training associated with one or more career fields. Table 3 displays the number of officers in the OLRDB AIMS Data Set by TRADOC site, career field, class year, and course type.

Table 1
Number of Students by Course Type

| Course Type | Number of Students |
|---|---|
| Officer Candidate School | 823 |
| Officer Basic Course #1 | 12,765 |
| Officer Basic Course #2 | 11 |
| Officer Advanced Course #1 | 6,454 |
| Officer Advanced Course #2 | 24 |
| Technical Course #1 | 2,122 |
| Technical Course #2 | 68 |
| Technical Course #3 | 0 |
| Technical Course #4 | 0 |
| Total Student/Course Segments | 22,267 |

Table 2
Student Rank by Course Type

| Military Rank | OCS | OBC | OAC | TC |
|---|---|---|---|---|
| 1st Lieutenant | - | 451 | 2228 | 457 |
| 2nd Lieutenant | - | 12293 | 12 | 965 |
| Captain | - | 6 | 4167 | 719 |
| Major | - | - | 38 | 42 |
| Lieutenant Colonel | - | - | 12 | 1 |
| Colonel | - | - | 2 | 1 |
| Private | 1 | - | - | - |
| Private 1st Class | 356 | - | - | - |
| Corporal | 9 | - | - | - |
| Sergeant | 281 | - | - | - |
| Sergeant 1st Class | 4 | - | - | - |
| Staff Sergeant | 53 | - | - | - |
| Master Sergeant | 1 | - | - | - |
| Warrant Officer 1 | 1 | - | - | - |
| Chief Warrant 2 | 9 | - | - | - |
| Chief Warrant 3 | 2 | - | - | - |
| Specialist 4 | 105 | - | - | - |
| Other | 1 | 26 | 19 | 5 |

Note. OCS = Officer Candidate School; OBC = Officer Basic Course; OAC = Officer Advanced Course; and TC = technical course.

Table 3
AIMS Data by Site and Career Field

| School Site and Career Field | 1985 | | | 1986 | | | 1987 | | |
|---|---|---|---|---|---|---|---|---|---|
| | OBC | OAC | TC | OBC | OAC | TC | OBC | OAC | TC |
| Fort Sill | | | | | | | | | |
| Field Artillery | 505 | 298 | 129 | 244 | 591 | 192 | 718 | 662 | 0 |
| Fort McClellan | | | | | | | | | |
| Chemical | 295 | 92 | 21 | 390 | 134 | 6 | 175 | 108 | 8 |
| Military Police | 383 | 207 | 0 | 387 | 196 | 0 | 292 | 142 | 0 |
| Fort Lee | | | | | | | | | |
| Quartermaster | 304 | 111 | 57 | 494 | 287 | 241 | 68 | 54 | 41 |
| Fort Gordon | | | | | | | | | |
| Signal Corp | 0 | 0 | 0 | 187 | 22 | 23 | 323 | 291 | 270 |
| Aberdeen PG | | | | | | | | | |
| Ordnance | 408 | 142 | 0 | 398 | 213 | 0 | 144 | 0 | 0 |
| Fort Knox | | | | | | | | | |
| Armor | 0 | 0 | 0 | 0 | 247 | 93 | 499 | 172 | 591 |
| Fort Ben Harrison | | | | | | | | | |
| Finance | 0 | 0 | 0 | 32 | 0 | 0 | 76 | 59 | 0 |
| Adjutant General | 0 | 0 | 0 | 53 | 49 | 0 | 321 | 142 | 264 |
| Fort Belvoir | | | | | | | | | |
| Engineer | 745 | 407 | 26 | 904 | 435 | 7 | 579 | 112 | 0 |
| Fort Bliss | | | | | | | | | |
| Air Defense Art. | 0 | 0 | 0 | 0 | 31 | 11 | 101 | 101 | 210 |
| Fort Huachuca | | | | | | | | | |
| Military Intell. | 0 | 0 | 0 | 133 | 103 | 0 | 0 | 7 | 0 |
| Fort Benning* | | | | | | | | | |
| Infantry | 1643 | 0 | 0 | 1784 | 746 | 0 | 191 | 317 | 0 |

* In addition Ft. Benning has 531 students in 1986 OCS courses and 292 in 1987 OCS courses

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## APPENDIX A

### Data Elements of AIMS TRADOC Site

| LENGTH IN BYTES | START POSITION | FIELD | DESCRIPTION/CODES |
|---|---|---|---|
| 2 | 1 | Student Type | 1 - Officer, U.S.<br>2 - Enlisted, U.S.<br>3 - Civilian, U.S.<br>4 - Dependent, U.S.<br>5 - Officer, Allied<br>6 - Enlisted, Allied<br>7 - Civilian, Allied<br>8 - Dependent, Allied<br>9 - Warrant Officer, U.S.<br>10 - Warrant Officer, Allied<br>11 - Commissioned Officer, U.S.<br>12 - Commissioned Officer, Allied |
| 1 | 3 | Sit-In Flag | 1 - Student was a sit-in<br>0 - Student was not a sit-in |
| 9 | 4 | Social Security | Student social security number |
| 4 | 13 | Course Code | Code represents the AIMS course code consisting of a four-character Training and Doctrine Command (TRADOC) Educational Data System (TREDS) course number. |
| 5 | 17 | Class Number and Year | Three-character class identifier and two-character year |
| 2 | 22 | Section Number | |
| | 24 | Number of Events | Number of graded events |
| 4 | 26 | Course Average | Student's final average in course |

| LENGTH IN BYTES | START POSITION | FIELD | DESCRIPTION/CODES |
|---|---|---|---|
| 2 | 30 | Class Standing | Final class standing |
| 2 | 32 | Number of Students in Class | |
| 1 | 34 | Type of Instruction | Y - Self-paced<br>N - Not self-paced |
| 4 | 35 | Rank | Military ranks<br>1LT - 1st Lieutenant<br>2LT - 2nd Lieutenant<br>CPT - Captain<br>MAJ - Major<br>LTC - Lt Colonel<br>COL - Colonel<br>B G - Brigadier Gen<br>M G - Major General<br>LTG - Lt General<br>GEN - General<br>G A - Gen of the Army<br>PV1 - Private<br>PV2 - Private<br>PVT1 - Private<br>PVT2 - Private<br>PFC - Pvt 1st Class<br>CPL - Corporal<br>SGT - Sergeant<br>SFC - Sgt 1st Class<br>SSG - Staff Sergeant<br>MSG - Master Sergeant<br>SGM - Sergeant Major<br>CSG - Cmd Sgt Major<br>W01 - Warrant Officer 1<br>CW2 - Chief Warrant 2<br>CW3 - Chief Warrant 3<br>CW4 - Chief Warrant 4<br>SP4 - Specialist 4<br>SP5 - Specialist 5<br>SP6 - Specialist 6<br>SP7 - Specialist 7 |
| 20 | 39 | Last Name | |
| 1 | 60 | First Initial | |
| 1 | 61 | Middle Initial | |

| LENGTH IN BYTES | START POSITION | FIELD | DESCRIPTION/CODES |
|---|---|---|---|
| 1 | 62 | Event Grading Type | Code representing the type of grading used for this event.<br>0 - Non Graded<br>1 - Percentage score<br>2 - GO or NOGO<br>3 - Both |
| 2 | 63 | Event Annex/Sub-Annex | |
| 2 | 65 | Event Department/ Sub-Department | |
| 2 | 67 | Event Lesson ID | |
| 2 | 70 | Event Version (Tests Only) | |
| 3 | 72 | Event Type | |
| 1 | 75 | Disposition Code | Code representing the status of the event for this student.<br>0 - Incomplete<br>1 - Active<br>2 - Exempt<br>3 - Complete<br>4 - Proficient |
| 1 | 76 | Go/NoGo Code | G - Go<br>N - Nogo |
| 5 | 77 | Event Percentage Score | Last score on this event |
| 2 | 82 | Number of Tries To Date | |
| 5 | 84 | Department of Instruction (DOI) Points Possible | Lockstep only |
| 4 | 89 | DOI Points Achieved | |
| 4 | 90 | Event Plan of Instruction (POI) Time Base | Time base in Hours Self-paced only |
| 2 | 95 | Event Learning Time | Self-paced only |

| LENGTH IN BYTES | START POSITION | FIELD | DESCRIPTION/CODES |
|---|---|---|---|
| 2 | 97 | Event Time Lost | Self-paced only |
| 9 | 99 | Date Completed/ Exempted | DD-MMM-YY format |
| 1 | 108 | Type of Instruction | Code specifying the type of instruction used for this event<br>0 - Lockstep<br>1 - Self-paced<br>2 - Group-paced<br>3 - Other |

APPENDIX B

AIMS Course Codes by Site and Career Fields

**Fort Benning - Infantry**
- 134X - INFANTRY OFFICER BASIC RES COMP
- 137C - INFANTRY OFFICER ADVANCED
- 139B - INFANTRY OFFICER BASIC
- 13RC - INFANTRY OFFICER ADVANCED RES COMP
- 135F - INFANTRY PRECOMMAND
- 136C - INFANTRY OFFICER ADVANCED
- 136M - INFANTRY OFFICER MAINTENANCE
- 132Z - BRANCH IMMATERIAL OFFICER CANDIDATE
- 133Z - OFFICER CANDIDATE SCHOOL
- 133G - OFFICER CANDIDATE RES COMPONENTS

**Fort Gordon - Signal Corp**
- 07AL - ECHELONS ABOVE CORPS PLATOON LEADERS
- 07AO - CORPS/DIVISION COMMUNICATIONS OPERATIONS OFFICER
- 07AP - ECHELONS ABOVE CORPS OPERATIONS OFFICER
- 07AS - SIGNAL OFFICER BASIC
- 07AT - SIGNAL OFFICER ADVANCED
- 07AU - SIGNAL OFFICER BASIC RES COMP
- 07AV - SIGNAL OFFICER ADVANCED RES COMP
- 07AB - SIGNAL PRECOMMAND

**Fort Huachuca - Military Intelligence**
- 18AE - MI OAC (ADVANCED TACTICAL ALL-SOURCE INT)
- 18AG - MI OFFICER ADVANCED (IMAGERY EXPLOITATION)
- 18AH - MI OFFICER ADVANCED (ELEC WARFARE/CRYPTO)
- 18AI - MI OAC (COUNTERINTELLIGENCE)
- 18BB - INTELLIGENCE OFFICER BASIC

**Fort McClellan - Chemical**
- 0374 - CHEMICAL OFFICER ADSPEC
- 03CA - CHEMICAL OFFICER ADVANCED
- 03CB - CHEMICAL OFFICER BASIC
- 03R4 - RC CHEMICAL OFFICER ADVANCED PHASE IV
- 03R6 - RC CHEMICAL OFFICER RESERVE PHASE VI
- 03LR - CHEMICAL OFFICER SENIOR STAFF
- 03OL - SENIOR COMMANDER/CHEMICAL OFFICER
- 03OR - CHEMICAL FIELD GRADE OFFICER

**Fort McClellan - Military Police**
- 04OA - MILITARY POLICE OFFICER ADVANCED
- 04OB - MILITARY POLICE OFFICER BASIC
- 04BR - MILITARY POLICE OFFICER BASIC
- 04PC - MILITARY POLICE PRECOMMAND

**Aberdeen Proving Ground - Ordnance**
- 08BB - ORDNANCE MAINT MANAG OFFICER BASIC
- 08A6 - ORDNANCE OFFICER ADVANCED FIELD MAINT MANAG
- 08A7 - ORDNANCE OFFICER ADVANCED WHOLESALE MAINT MANAG
- 08AR - ORDNANCE OFFICER ADVANCED
- 08AC - ORDNANCE OFFICER ADVANCED

**Fort Belvoir - Engineer**
- 16A8 - ENGINEER OFFICER ADVANCED - MODULE 8
- 16AA - EOAC RES COMP - COMMAND PHASE FOLLOW ON
- 16AD - ATOMIC DEMOLITION MUNITIONS OFFICER
- 16AO - ENGINEER OFFICER ADVANCED
- 16AR - ENGINEER OFFICER ADVANCED RES COMP
- 16BO - ENGINEER OFFICER BASIC
- 16BR - ENGINEER OFFICER BASIC RES COMP

**Fort Bliss - Air Defense Artillery**
- 178A - HAWK MISSILE STAFF OFFICER
- 17CU - CHAPARRAL/VULCAN OFFICER QUALIFICATION
- 17DK - HAWK OFFICER
- 17EQ - PATRIOT AIR DEFENSE OFFICER
- 17FJ - ADA OFFICER ADVANCED
- 17FK - OFFICER ADVANCED FOLLOW ON TRACK HAWK
- 17FL - OFFICER ADVANCED FOLLOW ON TRACK SHORAD
- 17FM - OFFICER ADVANCED FOLLOW ON TRACK PATRIOT
- 17FW - ADA OFFICER BASIC
- 1717 - AIR DEFENSE PRECOMMAND
- 172G - ADA OFFICER TACTICS REFRESHER RES COMP
- 17EV - PATRIOT AIR DEFENSE OFFICER
- 17FV - AIR DEFENSE ARTILLERY OFFICER BASIC
- 17NK - NIKE HERCULES OFFICER

**Fort Knox - Armor**
- 1003 - ARMOR OFFICER BASIC RES COMP
- 1004 - ARMOR OFFICER ADVANCED
- 1008 - JUNIOR OFFICER MAINTENANCE
- 1078 - ARMOR OFFICER BASIC (SINGLE TRACK)
- 1005 - ARMOR OFFICER ADVANCED RES COMP
- 1007 - SENIOR OFFICER PREVENTIVE LOGISTICS
- 1010 - ARMOR PRECOMMAND - BRANCH PHASE
- 1081 - SCOUT PLATOON LEADER

**Fort Lee - Quartermaster**
- 06L4 - LOGISTICS OFFICER, S4
- 06LB - QUARTERMASTER OFFICER BASIC
- 06LC - COMBAT SERVICE SUPPORT PRECOMMAND
- 06LN - QUARTERMASTER OFFICER ADVANCED
- 06LJ - JUDGE ADVOCATE GENERAL OFFICER BASIC

**Fort Benjamin Harrison - Adjutant General**
- 121A - ADJUTANT GENERAL OFFICER ADVANCED
- 121P - ADJUTANT GENERAL OFFICER BASIC
- 121K - ADJUTANT GENERAL PRECOMMAND
- 121N - ADJUTANT GENERAL OFFICER BASIC RC
- 121W - BATTALION S1 (PERS MANAGEMENT STAFF OFFICER)

**Fort Benjamin Harrison - Finance**
- 121Q - FINANCE OFFICER BASIC
- 121B - FINANCE OFFICER ADVANCED
- 124H - FINANCE PRECOMMAND

**Fort Sill - Field Artillery**
- 0101 - FIELD ARTILLERY OFFICER ADVANCED
- 0102 - FIELD ARTILLERY OFFICER BASIC
- 0104 - FA PRECOMMAND
- 0105 - FA OFFICER ADVANCED PREP U.S. OFF
- 0106 - FIELD ARTILLERY OFFICER ADVANCED RES COMP
- 0107 - FA TARGET ACQUISITION & SURVEY OFFICER
- 0108 - PERSHING II OFFICER
- 0109 - FA OFFICER BASIC RES COMP
- 0111 - COMMUNICATIONS-ELECT STAFF OFFICER

## APPENDIX C

### Conversion Chart for AIMS Data Elements

| TRADOC Values | | AIMS Values | |
|---|---|---|---|
| **Military Rank** | | | |
| RANK: Military Rank | | OCSRANK : OBC1RANK-OBC2RANK OAC1RANK-OAC2RANK TC1RANK-TC4RANK | Military rank while attending OCS, OBC, OAC, or technical course |
| MAJ | Major | MAJ | Major |
| LTC | Lieutenant Colonel | LTC | Lieutenant Colonel |
| COL | Colonel | COL | Colonel |
| LTG | Lieutenant General | LTG | Lieutenant General |
| GEN | General | GEN | General |
| 2KT | | 2LT | 2nd Lieutenant |
| 2L | | 2LT | 2nd Lieutenant |
| 2;T | | 2LT | 2nd Lieutenant |
| 2LY | | 2LT | 2nd Lieutenant |
| 2LT | | 2LT | 2nd Lieutenant |
| ILT | | 1LT | 1st Lieutenant |
| GA | General of the Army | G A | General of the Army |
| MG | Major General | M G | Major General |
| BG | Brigadier General | B G | Brigadier General |
| CAP | Captain | CPT | Captain |
| O-3 | Captain | CPT | Captain |
| CPT | Captain | CPT | Captain |
| WO1 | Warrant Officer | W01 | Warrant Officer |
| LT | | blank | |
| MR | | blank | |
| O2 | | blank | |
| O3 | | blank | |
| 01 | | blank | |
| 02 | | blank | |
| 03 | | blank | |
| 04 | | blank | |
| 2L5 | | blank | |
| WG6 | | blank | |
| 2NT | | blank | |
| WO2 | | blank | |
| ALT | | blank | |
| UNK | | blank | |
| GS5 | | blank | |
| GS7 | | blank | |
| G05 | | blank | |
| G07 | | blank | |
| G12 | | blank | |
| WLT | | blank | |
| 8 | | blank | |

## Appendix D

### OLRDB AIMS Data Set Variable Descriptions

| Variable | Variable Description |
|---|---|
| MATCHCOD | Encrypted social security number of student. |
| OCSSITE | Location (TRADOC post) where Officer Candidate School course was taken. |
| OCSCODE | Course code identifier for an Officer Candidate School course an officer completed. |
| OCSYEAR | Fiscal year when a particular class of an Officer Candidate School course began. |
| OCSCLASS | A number assigned to a particular class of an Officer Candidate School course within a given fiscal year. By using OCSCLASS and OCSYEAR, the class membership for a particular class of the OCS course can be reconstructed. |
| OCSSIZE | Number of U.S. Army students, regardless of military rank, in a particular class of an Officer Candidate School course. This number excludes students such as allied officers, civilians, dependents, and enlisted personnel. The class size needs to be considered in comparing a student's final grade with those of his/her class mates. |
| OCSRANK | Military rank of student while attending Officer Candidate School course. |
| OCSAVRG | Final course average, ranging from 0 to 100, based on all graded course requirements for an Officer Candidate School course. The course requirements and their weights for the final average differ across schools and across courses. |
| OCSSCOR | A score derived from an individual's final course average with reference to final grades earned by his/her class mates for an Officer Candidate School course. The score indicates a student's performance based on the Army Standard Score distribution with a mean of 100 and standard deviation of 20. Extremely low course grades result in standard scores with negative values (meaning that the course grades are more than five standard deviations away from the class mean). |

OCSREP Officer Candidate School course repeat indicator. A code of 2 indicates that a student enrolled in the same OCS course more than once. This information is derived on the basis of AIMS data provided to ARI. If a student was enrolled in the OCS course prior to the implementation of AIMS, this information would not be reflected by this data element. For the relatively few cases with more than one enrollment record for the same course, the most recent information, with a non-zero final grade, was retained for the OLRDB AIMS data set.

OBC1SITE Location (TRADOC post) where Officer Basic Course #1 was taken.

OBC1CODE Course code identifier for the first Officer Basic Course an officer completed. If an officer completed an additional, different OBC course (i.e., with different contents at a different school), data for the second OBC course are identified by OBC2 in the variable names.

OBC1YEAR Fiscal year when a particular class of an Officer Basic Course #1 began.

OBC1CLAS A number assigned to a particular class of an Officer Basic Course #1 within a given fiscal year. By using OBC1CLASS and OBC1YEAR, the class membership for a particular class of the OBC course can be reconstructed.

OBC1SIZE Number of U.S. Army commissioned officer students in a particular class of an Officer Basic Course #1. This number excludes students such as allied officers, civilians, dependents, and enlisted personnel. The class size needs to be considered in comparing a student's final grade with those of his/her class mates.

OBC1RANK Military rank of student while attending Officer Basic Course #1.

OBC1AVRG Final course average, ranging from 0 to 100, based on all graded course requirements for an Officer Basic Course #1. The course requirements and their weights for the final average differ across schools and across courses.

OBC1SCOR A score derived from an individual's final course average with reference to final grades earned by his/her class mates for an Officer Basic Course #1. The score indicates a student's performance based on the Army Standard Score distribution with a mean of 100 and standard deviation of 20. Extremely low

course grades result in standard scores with negative values (meaning that the course grades are more than five standard deviations away from the class mean).

OBC1REP Officer Basic Course #1 repeat indicator. A code of 2 indicates that a student enrolled in the same OBC course more than once. This information is derived on the basis of AIMS data provided to ARI. If a student was enrolled in the OBC course prior to the implementation of AIMS, this information would not be reflected by this data element. For the relatively few cases with more than one enrollment record for the same course, the most recent information, with a non-zero final grade, was retained for the OLRDB AIMS data set.

OBC2SITE Location (TRADOC post) where Officer Basic Course #2 was taken.

OBC2CODE Course code identifier for the second Officer Basic Course an officer completed. Note: This refers to an OBC course different from the first OBC course an officer completed, rather than a repeated enrollment in the same OBC course.

OBC2YEAR Fiscal year when a particular class of an Officer Basic Course #2 began.

OBC2CLAS A number assigned to a particular class of an Officer Basic Course #2 within a given fiscal year. By using OBC2CLAS and OBC2YEAR, the class membership for a particular class of the OBC course can be reconstructed.

OBC2SIZE Number of U.S. Army commissioned officer students in a particular class of an Officer Basic Course #2. This number excludes students such as allied officers, civilians, dependents, and enlisted personnel. The class size needs to be considered in comparing a student's final grade with those of his/her class mates.

OBC2RANK Military rank of student while attending Officer Basic Course #2.

OBC2AVRG Final course average, ranging from 0 to 100, based on all graded course requirements for an Officer Basic Course #2. The course requirements and their weights for the final average differ across schools and across courses.

OBC2SCOR A score derived from an individual's final course average with reference to final grades earned by his/her class mates for an Officer Basic Course #2.

The score indicates a student's performance based on the Army Standard Score distribution with a mean of 100 and standard deviation of 20. Extremely low course grades result in standard scores with negative values (meaning that the course grades are more than five standard deviations away from the class mean).

OBC2REP Officer Basic Course #2 repeat indicator. A code of 2 indicates that a student enrolled in the same OBC course more than once. This information is derived on the basis of AIMS data provided to ARI. If a student was enrolled in the OBC course prior to the implementation of AIMS, this information would not be reflected by this data element. For the relatively few cases with more than one enrollment record for the same course, the most recent information, with a non-zero final grade, was retained for the OLRDB AIMS data set.

OAC1SITE Location (TRADOC post) where Officer Advanced Course #1 was taken.

OAC1CODE Course code identifier for the first Officer Advanced Course an officer completed. If an officer completed an additional, different OAC course (i.e., with different contents at a different school), data for the second OAC course are identified by OAC2 in the variable names.

OAC1YEAR Fiscal year when a particular class of an Officer Advanced Course #1 began.

OAC1CLAS A number assigned to a particular class of an Officer Advanced Course #1 within a given fiscal year. By using OAC1CLAS and OAC1YEAR, the class membership for a particular class of the OAC course can be reconstructed.

OAC1SIZE Number of U.S. Army commissioned officer students in a particular class of an Officer Advanced Course #1. This number excludes students such as allied officers, civilians, dependents, and enlisted personnel. The class size needs to be considered in comparing a student's final grade with those of his/her class mates.

OAC1RANK Military rank of student while attending Officer Advanced Course #1.

OAC1AVRG Final course average, ranging from 0 to 100, based on all graded course requirements for an Officer Advanced Course #1. The course requirements and their weights for the final average differ across schools and across courses.

OAC1SCOR A score derived from an individual's final course average with reference to final grades earned by his/her class mates for an Officer Advanced Course #1. The score indicates a student's performance based on the Army Standard Score distribution with a mean of 100 and standard deviation of 20. Extremely low course grades result in standard scores with negative values (meaning that the course grades are more than five standard deviations away from the class mean).

OAC1REP Officer Advanced Course #1 repeat indicator. A code of 2 indicates that a student enrolled in the same OAC course more than once. This information is derived on the basis of AIMS data provided to ARI. If a student was enrolled in the OAC course prior to the implementation of AIMS, this information would not be reflected by this data element. For the relatively few cases with more than one enrollment record for the same course, the most recent information, with a non-zero final grade, was retained for the OLRDB AIMS data set.

OAC2SITE Location (TRADOC post) where Officer Advanced Course #2 was taken.

OAC2CODE Course code identifier for the second Officer Advanced Course an officer completed. Note: This refers to an OAC course different from the first OAC course an officer completed, rather than a repeated enrollment in the same OAC course.

OAC2YEAR Fiscal year when a particular class of an Officer Advanced Course #2 began.

OAC2CLAS A number assigned to a particular class of an Officer Advanced Course #2 within a given fiscal year. By using OAC2CLAS and OAC2YEAR, the class membership for a particular class of the OAC course can be reconstructed.

OAC2SIZE Number of U.S. Army commissioned officer students in a particular class of an Officer Advanced Course #2. This number excludes students such as allied officers, civilians, dependents, and enlisted personnel. The class size needs to be considered in comparing a student's final grade with those of his/her class mates.

OAC2RANK Military rank of student while attending Officer Advanced Course #2.

OAC2AVRG Final course average, ranging from 0 to 100, based on all graded course requirements for an Officer Advanced Course #2. The course requirements and their weights for the final average differ across schools and across courses.

OAC2SCOR A score derived from an individual's final course average with reference to final grades earned by his/her class mates for an Officer Advanced Course #2. The score indicates a student's performance based on the Army Standard Score distribution with a mean of 100 and standard deviation of 20. Extremely low course grades result in standard scores with negative values (meaning that the course grades are more than five standard deviations away from the class mean).

OAC2REP Officer Advanced Course #2 repeat indicator. A code of 2 indicates that a student enrolled in the same OAC course more than once. This information is derived on the basis of AIMS data provided to ARI. If a student was enrolled in the OAC course prior to the implementation of AIMS, this information would not be reflected by this data element. For the relatively few cases with more than one enrollment record for the same course, the most recent information, with a non-zero final grade, was retained for the OLRDB AIMS data set.

TC1SITE Location (TRADOC post) where Technical Course #1 was taken.

TC1CODE Course code identifier for the first Technical Course an officer completed. If an officer completed a different technical course (i.e., with different contents), data for the second technical course are identified by a TC2 in the variable names. Information for up to four technical courses may be included in a student's record.

TC1YEAR Fiscal year when a particular class of a Technical Course #1 began.

TC1CLASS A number assigned to a particular class of a Technical Course #1 within a given fiscal year. By using TC1CLASS and TC1YEAR, the class membership for a particular class of the TC course can be reconstructed.

TC1SIZE Number of U.S. Army commissioned officer students in a particular class of a Technical Course #1. This number excludes students such as allied officers, civilians, dependents, and enlisted personnel. The

class size needs to be considered in comparing a student's final grade with those of his/her class mates.

TC1RANK Military rank of student while attending Technical Course #1.

TC1AVRG Final course average, ranging from 0 to 100, based on all graded ccurse requirements for a Technical Course #1. The course requirements and their weights for the final average differ across schools and across courses.

TC1SCOR A score derived from an individual's final course average with reference to final grades earned by his/her class mates for a Technical Course #1. The score indicates a student's performance based on the Army Standard Score distribution with a mean of 100 and standard deviation of 20. Extremely low course grades result in standard scores with negative values (meaning that the course grades are more than five standard deviations away from the class mean).

TC1REP Technical Course #1 repeat indicator. A code of 2 indicates that a student enrolled in the same technical course more than once. This information is derived on the basis of AIMS data provided to ARI. If a student was enrolled in the TC course prior to the implementation of AIMS, this information would not be reflected by this data element. For the relatively few cases with more than one enrollment record for the same course, the most recent information, with a non-zero final grade, was retained for the OLRDB AIMS data set.

TC2SITE Location (TRADOC post) where Technical Course #2 was taken.

TC2CODE Course code identifier for the second technical course an officer completed. Note: This refers to a technical course different from the first technical course an officer completed, rather than a repeated enrollment in the same technical course.

TC2YEAR Fiscal year when a particular class of a Technical Course #2 began.

TC2CLASS A number assigned to a particular class of a Technical Course #2 within a given fiscal year. By using TC2CLASS and TC2YEAR, the class membership for a particular class of the TC course can be reconstructed.

TC2SIZE Number of U.S. Army commissioned officer students in a particular class of a Technical Course #2. This number excludes students such as allied officers, civilians, dependents, and enlisted personnel. The class size needs to be considered in comparing a student's final grade with those of his/her class mates.

TC2RANK Military rank of student while attending Technical Course #2.

TC2AVRG Final course average, ranging from 0 to 100, based on all graded course requirements for a Technical Course #2. The course requirements and their weights for the final average differ across schools and across courses.

TC2SCOR A score derived from an individual's final course average with reference to final grades earned by his/her class mates for a Technical Course #2. The score indicates a student's performance based on the Army Standard Score distribution with a mean of 100 and standard deviation of 20. Extremely low course grades result in standard scores with negative values (meaning that the course grades are more than five standard deviations away from the class mean).

TC2REP Technical Course #2 repeat indicator. A code of 2 indicates that a student enrolled in the same technical course more than once. This information is derived on the basis of AIMS data provided to ARI. If a student was enrolled in the TC course prior to the implementation of AIMS, this information would not be reflected by this data element. For the relatively few cases with more than one enrollment record for the same course, the most recent information, with a non-zero final grade, was retained for the OLRDB AIMS data set.

TC3SITE Location (TRADOC post) where Technical Course #3 was taken.

TC3CODE Course code identifier for the third technical course an officer completed. Note: This refers to a technical course different from the first and second technical courses an officer completed, rather than a repeated enrollment in the same technical course.

TC3YEAR Fiscal year when a particular class of a Technical Course #3 began.

TC3CLASS A number assigned to a particular class of a Technical Course #3 within a given fiscal year. By using TC3CLASS and TC3YEAR, the class membership for a particular class of the TC course can be reconstructed.

TC3SIZE Number of U.S. Army commissioned officer students in a particular class of a Technical Course #3. This number excludes students such as allied officers, civilians, dependents, and enlisted personnel. The class size needs to be considered in comparing a student's final grade with those of his/her class mates.

TC3RANK Military rank of student while attending Technical Course #3.

TC3AVRG Final course average, ranging from 0 to 100, based on all graded course requirements for a Technical Course #3. The course requirements and their weights for the final average differ across schools and across courses.

TC3SCOR A score derived from an individual's final course average with reference to final grades earned by his/her class mates for a Technical Course #3. The score indicates a student's performance based on the Army Standard Score distribution with a mean of 100 and standard deviation of 20. Extremely low course grades result in standard scores with negative values (meaning that the course grades are more than five standard deviations away from the class mean).

TC3REP Technical Course #3 repeat indicator. A code of 2 indicates that a student enrolled in the same technical course more than once. This information is derived on the basis of AIMS data provided to ARI. If a student was enrolled in the TC course prior to the implementation of AIMS, this information would not be reflected by this data element. For the relatively few cases with more than one enrollment record for the same course, the most recent information, with a non-zero final grade, was retained for the OLRDB AIMS data set.

TC4SITE Location (TRADOC post) where Technical Course #4 was taken.

TC4CODE Course code identifier for the fourth technical course an officer completed. Note: This refers to a technical course different from the first, second, and third technical courses an officer completed, rather than a repeated enrollment in the same technical course.

TC4YEAR Fiscal year when a particular class of a Technical Course #4 began.

TC4CLASS A number assigned to a particular class of a Technical Course #4 within a given fiscal year. By using TC4CLASS and TC4YEAR, the class membership for a particular class of the TC course can be reconstructed.

TC4SIZE Number of U.S. Army commissioned officer students in a particular class of a Technical Course #4. This number excludes students such as allied officers, civilians, dependents, and enlisted personnel. The class size needs to be considered in comparing a student's final grade with those of his/her class mates.

TC4RANK Military rank of student while attending Technical Course #4.

TC4AVRG Final course average, ranging from 0 to 100, based on all graded course requirements for a Technical Course #4. The course requirements and their weights for the final average differ across schools and across courses.

TC4SCOR A score derived from an individual's final course average with reference to final grades earned by his/her class mates for a Technical Course #4. The score indicates a student's performance based on the Army Standard Score distribution with a mean of 100 and standard deviation of 20. Extremely low course grades result in standard scores with negative values (meaning that the course grades are more than five standard deviations away from the class mean).

TC4REP Technical Course #4 repeat indicator. A code of 2 indicates that a student enrolled in the same technical course more than once. This information is derived on the basis of AIMS data provided to ARI. If a student was enrolled in the TC course prior to the implementation of AIMS, this information would not be reflected by this data element. For the relatively few cases with more than one enrollment record for the same course, the most recent information, with a non-zero final grade, was retained for the OLRDB AIMS data set.

## APPENDIX E

### OLRDB AIMS Data Set Program Procedures

### Procedure #1 - Tape Map Initial AIMS Tape

```
//EPXMAP JOB (WTFF,748),RAMSEY
/*MESSAGE SILL05,RS
/*ACCESS WRZ1KFD
/*ROUTE XEQ 9TRACKHI
//*       AIMS.TAPEMAP.INITIAL ON FILE60
//H1 EXEC TAPEMAP,TAPE=SILL05,DRIVE=9TRACKHI,OPTIONS=SCAN,
//   DSNUM=ALL
//
```

## Procedure #2 - Copy Initial AIMS Tape to NIH Tape

```
//EPXCOPY JOB (WTFF,748,C),RAMSEY
/*MESSAGE SILL05,RS
/*ACCESS WRZ1KFD
/*ROUTE XEQ 9TRACKHI
/*ROUTE XEQ TAPE
//*   AIMS.TAPECOPY.INITIAL ON FILE60
//H1 EXEC COPY
//COPY.SYSUT1 DD VOL=SER=SILL05,UNIT=9TRACKHI,DISP=OLD,
//   LABEL=(1,NL),DCB=(RECFM=FB,LRECL=109,BLKSIZE=31610,OPTCD=Q)
//   DD VOL=SER=SILL05,UNIT=9TRACKHI,DISP=OLD,
//   LABEL=(1,NL),DCB=(RECFM=FB,LRECL=109,BLKSIZE=31610,OPTCD=Q)
//COPY.SYSUT2 DD DSN=WRZ1KFD.SILL.D0888,UNIT=TAPE,DISP=(,KEEP),
//   DCB=(RECFM=FB,LRECL=109,BLKSIZE=32700)
```

## Procedure #3 - Tape Map NIH Copy of Initial Tape

```
//EPXMAP JOB (WTFF,748),RAMSEY
/*MESSAGE 011939,R
/*ACCESS WRZ1KFD
/*ROUTE XEQ TAPE
//*       AIMS.TAPEMAP.NIH ON FILE60
//H1 EXEC TAPEMAP,TAPE=011939,DRIVE=TAPE,OPTIONS=SCAN,
//   DSNUM=ALL
//
```

Procedure #4 - Sort File By Social Security Number

```
//EPXSORT JOB (WTFF,748,C),RAMSEY
/*ROUTE XEQ TAPE
/*MESSAGE 068487,R;002014,R
/*ACCESS WRZ1KFD
//*    AIMS.SORT.SSN ON FILE60
//H1 EXEC SORT
//SORT.SORTIN DD DSN=WRZ1KFD.SILL.D0888,UNIT=TAPE,VOL=SER=068487,
//  DISP=(OLD,KEEP)
//  DD DSN=WRZ1KFD.SILL.D0688,UNIT=TAPE,VOL=SER=002014,
//  DISP=(OLD,KEEP)
//SORT.SORTOUT DD DSN=WRZ1KFD.SILL.S0888,UNIT=TAPE,
//  DISP=(NEW,KEEP)
//SORT.SYSIN DD *
  SORT FIELDS=(4,9,CH,A,13,97,CH,A,1,3,CH,A),FILSZ=E100000
//
```

Procedure #5 - Delete Event Records & Extract Courses

```
//EPXDROP JOB (WTFF,748,C),RAMSEY,REGION=2000K
/*ROUTE XEQ TAPE
/*MESSAGE 062908,R;091218,W
/*ACCESS WRZ1KFD
//*        AIMS.PLI.DROPEVNT ON FILE60
//H1 EXEC PLIXCOMP
//COMP.SYSIN DD *
  DROP:
    PROC OPTIONS(MAIN);
  /*                                                              */
  /*  THIS PROGRAM READS AIMS DATA FROM A SPECIFIC TRADOC POST    */
  /*  LOCATION.  THE PURPOSE OF THIS PROGRAM IS TO DROP EVENT     */
  /*  RECORDS, EXTRACT SELECTED COURSE CODES, AND TO ASSIGN A     */
  /*  SITE CODE TO THE TRADOC POST.                               */
  /*                                                              */
    DCL 1 IN_REC,
        2 STUDTYPE CHAR(2),
        2 SITFLAG CHAR(1),
        2 SSN CHAR(9),
        2 COURSECD CHAR(4),
        2 CLASSNBR CHAR(5),
        2 FILL CHAR(88);
    DCL 1 OUT_REC,
        2 STUDTYPE CHAR(2),
        2 SITFLAG CHAR(1),
        2 SSN CHAR(9),
        2 COURSECD CHAR(4),
        2 CLASSNBR CHAR(5),
        2 FILL CHAR(88),
        2 SITECODE CHAR(2) INIT ('SI');
  /*                                                              */
  /*  SITE CODE CHANGES FOR EACH TRADOC POST.  VALID              */
  /*  SITE CODES=AB, BH, BL, BN, BV, GO, HU, KN, LE, MC, SI       */
  /*                                                              */
    DCL NN(13) FIXED BIN(31) INIT((13) 0B);
    DCL 1 COUNT,
        2 CC CHAR(3) INIT('1'),
        2 N(13) PIC'(9)Z9' INIT((13) 0);
    DCL OLDSSN CHAR(18);
  /*                                                              */
  /*  OUT1 = FILE OF PROCESSED COURSE CODE RECORDS RETAINED       */
  /*  OUT2 = FILE OF EVENT RECORDS                                */
  /*  OUT3 = FILE OF UNPROCESSED COURSE CODE RECORDS              */
  /*                                                              */
    DCL OUTFILE FILE RECORD OUTPUT SEQL ENV(CONSECUTIVE);
    DCL INFILE FILE RECORD INPUT SEQL ENV(CONSECUTIVE);
    DCL OUT1 FILE RECORD OUTPUT SEQL ENV(CONSECUTIVE);
    DCL OUT2 FILE RECORD OUTPUT SEQL ENV(CONSECUTIVE);
    DCL OUT3 FILE RECORD OUTPUT SEQL ENV(CONSECUTIVE);
    ON ENDFILE(INFILE) GOTO EOF;
    OPEN FILE(INFILE),FILE(OUTFILE),FILE(OUT1),FILE(OUT2),FILE(OUT3);
```

Procedure #5--Continued

```
 READ1:
   READ FILE(INFILE) INTO (IN_REC);
   NN(1)=NN(1)+1B;
/*                                                                  */
/*  WRITE ONE RECORD PER OFFICER FOR SELECTED COURSE CODES.         */
/*                                                                  */
CHECK:
   IF IN_REC.COURSECD='0101' | IN_REC.COURSECD='0102' |
      IN_REC.COURSECD='0104' | IN_REC.COURSECD='0105' |
      IN_REC.COURSECD='0106' | IN_REC.COURSECD='0107' |
      IN_REC.COURSECD='0108' | IN_REC.COURSECD='0109' |
      IN_REC.COURSECD='0111' THEN DO;
      NN(2)=NN(2)+1B;
      OUT_REC = IN_REC, BY NAME;
      WRITE FILE(OUT1) FROM (OUT_REC);
      OLDSSN = IN_REC.SSN||IN_REC.COURSECD||IN_REC.CLASSNBR;
   END;
 /*                                                                 */
 /*  DROP SPECIFIC COURSE CODE RECORDS                              */
 /*                                                                 */
   ELSE DO;
        NN(4)=NN(4)+1B;
        OUT_REC = IN_REC, BY NAME;
        WRITE FILE(OUT3) FROM (OUT_REC);
        GOTO READ1;
   END;
 /*                                                                 */
 /*  DROP EVENT RECORDS                                             */
 /*                                                                 */
 READ2:
   READ FILE(INFILE) INTO (IN_REC);
   NN(1)=NN(1)+1B;
   IF OLDSSN = IN_REC.SSN||IN_REC.COURSECD||IN_REC.CLASSNBR THEN DO;
      NN(3)=NN(3)+1B;
      OUT_REC=IN_REC, BY NAME;
      WRITE FILE(OUT2) FROM (OUT_REC);
      GOTO READ2;
   END;
        ELSE GOTO CHECK;
 EOF:
   DO I=1 TO 13;
       N(I)=NN(I);
   END;
   PUT SKIP EDIT('NUMBER RECORDS READ:           ',NN(1)) (A,F(8));
   PUT SKIP EDIT('NUMBER COURSE RECORDS KEPT:    ',NN(2)) (A,F(8));
   PUT SKIP EDIT('NUMBER EVENT RECORDS DROPPED: ',NN(3)) (A,F(8));
   PUT SKIP EDIT('NUMBER COURSE CODES DROPPED:  ',NN(4)) (A,F(8));
   CLOSE FILE(INFILE),FILE(OUTFILE),FILE(OUT1),FILE(OUT2),FILE(OUT3);
  END DROP;
//H2 EXEC PLIXLDGO
//GO.OUTFILE DD SYSOUT=A,DCB=(RECFM=FBA,LRECL=133,BLKSIZE=3990)
```

Procedure #5--Continued

```
//GO.INFILE DD DSN=WRZ1KFD.SILL.S0888,VOL=SER=062908,
//    DISP=(OLD,KEEP),UNIT=TAPE
//GO.OUT1 DD DSN=WRZ1KFD.DROPEVNT.SILL.D0888,UNIT=TAPE,VOL=SER=091218,
//    DISP=(OLD,KEEP),DCB=(RECFM=FB,LRECL=111,BLKSIZE=32190)
//GO.OUT2 DD DSN=WTFFEPX.SILL.EVENTS,UNIT=FILE,
     SPACE=(CYL,(10,10),RLSE),VOL=SER=TMP002,
//    DISP=(NEW,KEEP),DCB=(RECFM=FB,LRECL=111,BLKSIZE=11100)
//GO.OUT3 DD DSN=WTFFEPX.SILL.COURSES,UNIT=FILE,
//    SPACE=(CYL,(10,10),RLSE),VOL=SER=TMP002,
//    DISP=(NEW,KEEP),DCB=(RECFM=FB,LRECL=111,BLKSIZE=11100)
//
```

## Procedure #6 - Delete Duplicate Records

```
//EPXDUP JOB (WTFF,748,C),RAMSEY,REGION=2500K
/*ROUTE XEQ TAPE
/*MESSAGE 018751,R;091218,R
/*ACCESS WRZ1KFD
/*        AIMS.PLI.DEDUP ON FILE60
//H1 EXEC PLIXCOMP
//COMP.SYSIN DD *
 /*                                                                  */
 /*  THIS PROGRAM READ AIMS DATA FROM 11 TRADOC SITES.  THE          */
 /*  PURPOSE OF THIS PROGRAM IS TO DELETE DUPLICATE AND              */
 /*  BLANK RECORDS.                                                  */
 /*                                                                  */
 DUPS:
     PROC OPTIONS(MAIN);
     DCL IN_REC CHAR(111);
     DCL HOLD CHAR(111);
     DCL NN(13) FIXED BIN(31) INIT((13) 0B);
     DCL 1 COUNT,
         2 CC CHAR(3) INIT('1'),
         2 N(13) PIC'(9)Z9' INIT((13) 0);
 /*                                                                  */
 /*  OUT = FILE OF PROCESSED RECORDS RETAINED - NO DUPLICATES        */
 /*  OUT2 = FILE OF DUPLICATE RECORDS                                */
 /*                                                                  */
     DCL INFILE FILE RECORD INPUT SEQL ENV(CONSECUTIVE);
     DCL OUT FILE RECORD OUTPUT SEQL ENV(CONSECUTIVE);
     DCL OUT2 FILE RECORD OUTPUT SEQL ENV(CONSECUTIVE);
     DCL OUTFILE FILE RECORD OUTPUT SEQL ENV(CONSECUTIVE);
     ON ENDFILE(INFILE) GOTO EOF;
     OPEN FILE(INFILE),FILE(OUT),FILE(OUTFILE);
     READ FILE(INFILE) INTO(IN_REC);
     NN(1)=NN(1)+1B;
     WRITE FILE(OUT) FROM(IN_REC);
     NN(2)=NN(2)+1B;
     HOLD = IN_REC;
 /*                                                                  */
 /*  TEST FOR BLANK RECORDS.                                         */
 /*                                                                  */
 READ:
     READ FILE(INFILE) INTO(IN_REC);
     NN(1)=NN(1)+1B;
     IF IN_REC=' ' THEN DO;
        NN(4)=NN(4)+1B;
        GOTO READ;
     END;
  /*                                                                 */
  /*  TEST FOR DUPLICATE RECORDS.                                    */
  /*                                                                 */
      IF IN_REC = HOLD THEN DO;
         NN(3) = NN(3) + 1B;
         WRITE FILE(OUT2) FROM(HOLD);
```

Procedure #6--Continued

```
         WRITE FILE(OUT2) FROM(IN_REC);
         GOTO READ;
      END;
  /*                                                              */
  /*  WRITE NONDUPLICATE AND NONBLANK RECORDS.                    */
  /*                                                              */
      WRITE FILE(OUT) FROM(IN_REC);
      NN(2)=NN(2)+1B;
      HOLD = IN_REC;
      GOTO READ;
  EOF:
      DO I=1 TO 13;
          N(I)=NN(I);
      END;
      PUT SKIP EDIT('NUMBER RECORDS READ:        ',NN(1)) (A,F(8));
      PUT SKIP EDIT('NUMBER RECORDS KEPT:        ',NN(2)) (A,F(8));
      PUT SKIP EDIT('NUMBER DUPLICATE RECORD:    ',NN(3)) (A,F(8));
      PUT SKIP EDIT('NUMBER BLANK RECORDS:       ',NN(4)) (A,F(8));
      CLOSE FILE(INFILE),FILE(OUT),FILE(OUTFILE);
  END DUPS;
//H2 EXEC PLIXLDGO
//GO.OUTFILE DD SYSOUT=A,DCB=(RECFM=FBA,LRECL=133,BLKSIZE=3990)
//GO.INFILE DD DSN=WRZ1KFD.AIMS.DEDUP.ALLSITES,VOL=SER=018751,
//   DISP=OLD,UNIT=TAPE
//   DD DSN=WRZ1KFD.DROPEVNT.SILL.D0888,UNIT=TAPE,VOL=SER=091218,
//   DISP=OLD
//GO.OUT DD DSN=WRZ1KFD.AIMS.DEDUP2.ALLSITES,UNIT=TAPE,
//   DISP=(NEW,KEEP),DCB=(RECFM=FB,LRECL=111,BLKSIZE=32190)
//GO.OUT2 DD DSN=WTFFEPX.DUP,UNIT=FILE,DISP=(,KEEP),
//   SPACE=(TRK,(10,10),RLSE),
//   VOL=SER=TMP003,DCB=(RECFM=FB,LRECL=111,BLKSIZE=22200)
```

## Procedure #7 - Match to Officer Master File

```
//EPXSAS JOB (WTFF,748,C),RAMSEY,REGION=3000K
/*ROUTE XEQ TAPE
/*ROUTE XEQ MSS
/*MESSAGE 041233,R
/*ACCESS WRZ1KFD
/*UNNUMBERED
//*  AIMS.SAS.OMFMATCH ON FILE60
//PROCLIB DD DSN=ZABCRUN.PROCLIB,DISP=SHR
//STEP1 EXEC SAS
//IN1  DD DSN=WRZ1KFD.AIMS.DEDUP2.ALLSITES,VOL=SER=041233,
//      DISP=(OLD,KEEP),UNIT=TAPE
//IN2  DD DSN=WRZ1KFD.OMF86SSN,UNIT=MSS,DISP=SHR
//OUT1 DD DSN=WRZ1KFD.AIMS.SAS2.ALLSITES,DISP=(NEW,KEEP),UNIT=TAPE
//OUT2 DD DSN=WRZ1KFD.AIMS.SAS.D0824,DISP=(NEW,KEEP),UNIT=TAPE
//SYSIN DD *
*
    THIS PROGRAM CREATES A SAS FILE USING DATA FROM 11 TRADOC
    SITES.  THE PURPOSE OF THIS PROGRAM IS TO DROP COURSE AVERAGE
    RECORDS = 0, DROP COURSE REPEAT RECORDS, AND DROP RECORDS
    CODED AS NONOFFICER STUDENT TYPES UNLESS AN OFFICER'S SOCIAL
    SECURITY NUMBER APPEARS IN THE OFFICER MASTER FILE (OMF).
;
DATA OUT1.AIMS;
INFILE IN1;
INPUT  STUDTYPE   $CHAR2.
       SITFLAG    $CHAR1.
       SSN        $CHAR9.
       COURSECD   $CHAR4.
       CLASSNBR   $CHAR3.
       CLASSYR    $CHAR2.
       SECTION    $CHAR2.
       NBREVNTS   $CHAR2.
       COURSEAV   4.
       CLSSTAND   $CHAR2.
       NBRSTUDS   2.
       TYPINSTR   $CHAR1.
       RANK       $CHAR4.
       LASTNAME   $CHAR20.
       FRSTINIT   $CHAR1.
       MIDLINIT   $CHAR1.
       EVNTGRDT   $CHAR1.
       EVNTANX    $CHAR2.
       EVNTDEPT   $CHAR2.
       EVNTLESN   $CHAR2.
       EVNTVERS   $CHAR2.
       EVNTTYPE   $CHAR3.
       DISPCODE   $CHAR1.
       GONOGO     $CHAR1.
       EVNTSCOR   5.2
       NBRTRIES   2.
       DOIPTSMX   5.
```

Procedure #7--Continued

```
        DOIPTSAC    4.
        EVNTPOIT    4.
        EVNTLRNT    2.
        EVNTLOST    2.
        DATECOMP    $CHAR9.
  @106  YRCOMP      $CHAR2.
  @102  MONCOMP     $CHAR3.
  @99   DAYCOMP     $CHAR2.
  @108  TYPEINST    $CHAR1.
        BLANK       $CHAR1.
        SITECODE    $CHAR2.;
*
    OUT1 = SAS FILE - ALL DATA FIELDS
    OUT2 = SAS FILE - SELECTED DATA FIELDS WITH COURSE REPEATS,
           COURSE AVERAGE = 0, AND NONOFFICER STUDENT TYPE
           RECORDS DROPPED
;
DATA TEMP1;
     SET OUT1.AIMS;
     KEEP SSN SITECODE COURSECD CLASSNUM CLASSNBR CLASSYR
          RANK COURSEAV STUDTYPE COURSREP;
     COURSREP=SSN||COURSECD;
*
    RECODE 1986 CLASS YEAR AND CLASS NUMBER FOR FORT
    HUACHUCA TO COINCIDE WITH OTHER SITES CODING TECHNIQUE.
;
    IF SITECODE='HU' AND CLASSYR^='87' THEN DO;
       IF CLASSYR='02' THEN CLASSNBR='002';
       ELSE IF CLASSYR='03' THEN CLASSNBR='003';
       ELSE IF CLASSYR='04' THEN CLASSNBR='004';
       ELSE IF CLASSYR='05' THEN CLASSNBR='005';
       ELSE IF CLASSYR='07' THEN CLASSNBR='007';
       ELSE IF CLASSYR='11' THEN CLASSNBR='011';
       ELSE IF CLASSYR='15' THEN CLASSNBR='015';
       CLASSYR='86';
    END;
     CLASSNUM=CLASSNBR||CLASSYR;
     PROC SORT DATA=TEMP1 OUT=TEMP2; BY COURSREP CLASSNUM;
     PROC FREQ DATA=TEMP2;
     TABLES SITECODE COURSECD CLASSNBR CLASSYR
            RANK COURSEAV STUDTYPE;
     TITLE 'COURSE RECORDS';
     PROC FREQ DATA=TEMP2;
     TABLES COURSECD * CLASSYR;
     TITLE 'COURSE RECORDS';
*
    DROP COURSE REPEAT RECORDS. COURSE RECORD WITH HIGHER
    CLASS NUMBER IS RETAINED.  REPFLAG = 1 IF COURSE WAS NOT
     REPEATED.  REPFLAG = 2 IF COURSE WAS REPEATED.
 ;
 DATA TEMP3;
      SET TEMP2; BY COURSREP;
```

Procedure #7--Continued

```
      IF FIRST.COURSREP THEN REPFLAG=0;
     REPFLAG+1;
     IF LAST.COURSREP THEN OUTPUT TEMP3;
     PROC FREQ DATA=TEMP3;
     TABLES SITECODE COURSECD CLASSNBR CLASSYR
            RANK COURSEAV STUDTYPE REPFLAG;
     TITLE 'COURSE REPEAT RECORDS EXCLUDED';
     PROC FREQ DATA=TEMP3;
     TABLES COURSECD * CLASSYR;
     TITLE 'COURSE REPEAT RECORDS EXCLUDED';
*
    DROP COURSE AVERAGE = 0 RECORDS.
;
DATA SAVE DROP;
     SET TEMP3;
     IF REPFLAG>2 THEN REPFLAG=2;
     IF COURSEAV^=0 THEN OUTPUT SAVE;
        ELSE OUTPUT DROP;
     PROC FREQ DATA=SAVE;
     TABLES SITECODE COURSECD CLASSNBR CLASSYR
            RANK COURSEAV STUDTYPE REPFLAG;
     TITLE 'COURSE REPEAT & COURSE AVERAGE=0 RECORDS EXCLUDED';
     PROC FREQ DATA=SAVE;
     TABLES COURSECD * CLASSYR;
     TITLE 'COURSE REPEAT & COURSE AVERAGE=0 RECORDS EXCLUDED';
     PROC SORT DATA=IN2.OMF86SSN OUT=OMFSSN(RENAME=(SSN=RSSN));
      BY SSN;
*
   CHANGE SOCIAL SECURITY NUMBER TO NUMERIC VALUE TO MATCH
   SOCIAL SECURITY NUMBER IN THE OMF FILE.
;
DATA AIMSDATA;
     SET SAVE;
     RSSN = INPUT(SSN,9.);
     PROC SORT; BY RSSN;
*
   MATCH SOCIAL SECURITY NUMBERS OF STUDENT RECORDS TO THE
   SOCIAL SECURITY NUMBERS IN THE OMF FILE.
   OMFFLAG = 1  IF SOCIAL SECURITY NUMBERS CODED WITH STUDENT
   TYPES 03-08 APPEAR IN THE OMF FILE.
;
DATA MATCH;
     MERGE OMFSSN(IN=A) AIMSDATA(IN=B); BY RSSN;
     MATCHFLG = A * 10 + B;
     IF ('03' LE STUDTYPE LE '08') AND MATCHFLG=11 THEN OMFFLAG=1;
     IF B;
     PROC FREQ DATA=MATCH;
     TABLES OMFFLAG MATCHFLG;
     TITLE 'OMF MATCHES';
*
    DROP NONOFFICER STUDENT TYPES (03-08) IF THEY DO NOT APPEAR
    IN THE OMF FILE.
```

Procedure #7--Continued

```
DATA OUT2.AIMS;
     SET MATCH;
     IF ('03' LE STUDTYPE LE '08') AND OMFFLAG^=1 THEN DELETE;
     PROC FREQ DATA=OUT2.AIMS;
     TABLES SITECODE COURSECD CLASSNBR CLASSYR
            RANK COURSEAV STUDTYPE REPFLAG OMFFLAG MATCHFLG;
     TITLE 'COURSE REPEAT, COURSE AVERAGE=0, AND';
     TITLE2 'NONOFFICER STUDENT TYPE RECORDS EXCLUDED';
     PROC FREQ DATA=OUT2.AIMS;
     TABLES COURSECD * CLASSYR;
     TITLE 'COURSE REPEAT, COURSE AVERAGE=0, AND';
     TITLE2 'NONOFFICER STUDENT TYPE RECORDS EXCLUDED';
//
```

## Procedure #8 - Create AIMS SAS Data Set

```
//EPXSAS JOB (WTFF,748,C),RAMSEY,REGION=3000K
/*ROUTE XEQ TAPE
/*MESSAGE 093778,R
/*ACCESS WRZ1KFD
/*UNNUMBERED
/*JOBOUT COPIES=2
//*  AIMS.SAS.DATABASE ON FILE60
//PROCLIB DD DSN=ZABCRUN.PROCLIB,DISP=SHR
//STEP1 EXEC SAS
//IN  DD DSN=WRZ1KFD.AIMS.SAS.D0824,VOL=SER=093778,
//     DISP=(OLD,KEEP),UNIT=TAPE
//OUT1 DD DSN=WRZ1KFD.OCS,DISP=(NEW,DELETE,DELETE),UNIT=TAPE
//OUT2 DD DSN=WRZ1KFD.OBC,DISP=(NEW,DELETE,DELETE),UNIT=TAPE
//OUT3 DD DSN=WRZ1KFD.OAC,DISP=(NEW,DELETE,DELETE),UNIT=TAPE
//OUT4 DD DSN=WRZ1KFD.TC,DISP=(NEW,DELETE,DELETE),UNIT=TAPE
//OUT5 DD DSN=WRZ1KFD.AIMS.DATABASE.D0828,DISP=(NEW,KEEP),UNIT=TAPE
//SASLIB DD DSN=WRZ1KFD.OLRDB.FORMATS,DISP=SHR
//SYSIN DD *
   *
       THIS PROGRAM CREATES A SAS DATA BASE OF DATA FROM 11 TRADOC
       SITES.  THE DATA BASE CONTAINS AIMS HISTORICAL DATA FOR
       SELECTED COURSES TAKEN BY U.S. OFFICERS.
   ;
   DATA RANKS;
        SET IN.AIMS;
   *
       RECODE OFFICER RANKS AND RECODE INVALID RANKS TO BLANK
       FOR CASES RETAINED IN THE DATA BASE.
   ;
         IF RANK='CAP' OR RANK='O-3' THEN RANK='CPT';
         ELSE IF RANK='LT'  OR RANK='MR'  OR RANK='O2'  OR
                 RANK='O3'  OR RANK='01'  OR RANK='02'  OR
                 RANK='03'  OR RANK='04'  OR RANK='2L5' OR
                 RANK='WG6' OR RANK='2NT' THEN RANK='    ';
         ELSE IF RANK='2KT' OR RANK='2L'  OR RANK='2;T' OR
                 RANK='2LY' THEN RANK='2LT';
         ELSE IF RANK='ILT' THEN RANK='1LT';
         ELSE IF RANK='GA'  THEN RANK='G A';
         ELSE IF RANK='MG'  THEN RANK='M G';
         ELSE IF RANK='BG'  THEN RANK='B G';
         ELSE IF RANK < ' ' THEN RANK='    ';
   *
       RECODE NONOFFICER RANKS FOR OCS COURSES AND RECODE INVALID
       RANKS TO BLANK FOR CASES RETAINED IN THE DATA BASE.
   ;
       IF COURSECD='133Z' OR COURSECD='132Z' OR
       COURSECD='133G' THEN DO;
       IF RANK='WO2' OR RANK='ALT' OR RANK='UNK'  OR
          RANK='WLT' OR RANK='8'   OR RANK='GS5'  OR
          RANK='GS7' OR RANK='G05' OR RANK='G07'  OR
          RANK='G12' THEN RANK='    ';
```

Procedure #8--Continued

```
          ELSE IF RANK='WO1' THEN RANK='W01';
       END;
     *
      DROP NONOFFICER RANK RECORDS EXCEPT FOR OFFICER CANDIDATE
      SCHOOL COURSES.  ALL RANKS ARE RETAINED FOR OCS COURSES.
 ;
      ELSE DO;
      IF RANK='2LT' OR RANK='1LT' OR RANK='CPT' OR
         RANK='MAJ' OR RANK='LTC' OR RANK='COL' OR
         RANK='B G' OR RANK='M G' OR RANK='LTG' OR
         RANK='GEN' OR RANK='G A' OR RANK='    ';
      END;
     PROC FREQ;
      TABLES SITECODE COURSECD CLASSNBR CLASSYR
      RANK COURSEAV STUDTYPE REPFLAG OMFFLAG;
      TITLE 'DATA BASE AFTER NONOFFICER RECORDS DROPPED';
     PROC FREQ;
      TABLES COURSECD * CLASSYR;
      TITLE 'DATA BASE AFTER NONOFFICER RECORDS DROPPED';
 *
   CATEGORIZE DATA FIELDS INTO OFFICER CANDIDATE SCHOOL (OCS),
   OFFICER BASIC COURSE (OBC), OFFICER ADVANCED COURSE (OAC),
   OR TECHNICAL COURSE (TC) COURSE TYPES.
 ;
  DATA TEMP1;
       SET RANKS;
       IF COURSECD='133Z' OR COURSECD='132Z' OR
          COURSECD='133G' THEN COURSTYP='OCS';
       ELSE
          IF COURSECD='134X' OR COURSECD='139B' OR COURSECD='07AS' OR
             COURSECD='07AU' OR COURSECD='18BB' OR COURSECD='03CB' OR
             COURSECD='040B' OR COURSECD='04BR' OR COURSECD='08BB' OR
             COURSECD='16BO' OR COURSECD='16BR' OR COURSECD='17FW' OR
             COURSECD='17FV' OR COURSECD='1003' OR COURSECD='1078' OR
             COURSECD='06LB' OR COURSECD='06LJ' OR COURSECD='121P' OR
             COURSECD='121Q' OR COURSECD='121N' OR COURSECD='0102' OR
             COURSECD='0109' THEN COURSTYP='OBC';
          ELSE
          IF COURSECD='137C' OR COURSECD='13RC' OR COURSECD='136C' OR
             COURSECD='07AT' OR COURSECD='07AV' OR COURSECD='18AE' OR
             COURSECD='18AG' OR COURSECD='18AH' OR COURSECD='18AI' OR
             COURSECD='03CA' OR COURSECD='040A' OR COURSECD='08AC' OR
             COURSECD='08A7' OR COURSECD='08AR' OR COURSECD='16A8' OR
             COURSECD='16AA' OR COURSECD='16AO' OR COURSECD='16AR' OR
             COURSECD='17FJ' OR COURSECD='17FK' OR COURSECD='17FL' OR
             COURSECD='17FM' OR COURSECD='1004' OR COURSECD='1005' OR
             COURSECD='06LN' OR COURSECD='121A' OR COURSECD='121B' OR
             COURSECD='0101' OR COURSECD='0105' OR COURSECD='0106' OR
             COURSECD='08A6' OR COURSECD='03R4' THEN COURSTYP='OAC';
          ELSE COURSTYP='TC';
          CLASCODE=COURSECD||CLASSNUM;
          SSNTYPE=SSN||COURSTYP;
```

Procedure #8--Continued

```
     PROC SORT DATA=TEMP1 OUT=TEMP2; BY SSNTYPE CLASSYR;
DATA TYPES OUT1.OCS OUT2.OBC OUT3.OAC OUT4.TC;
     SET TEMP2; BY SSNTYPE;
     IF FIRST.SSNTYPE THEN TYPECNT=0;
*
    IF MORE THAN ONE OCS COURSE WAS TAKEN BY A STUDENT,
    DROP MOST RECENT OCS COURSE(S).
;
     IF COURSTYP='OCS' THEN DO;
        TYPECNT+1;
        IF TYPECNT > 1 THEN OUTPUT OUT1.OCS;
        ELSE OUTPUT TYPES;
     END;
*
    IF MORE THAN TWO OBC COURSES WERE TAKEN BY A STUDENT,
    DROP MOST RECENT OBC COURSE(S).
;
     ELSE IF COURSTYP='OBC' THEN DO;
          TYPECNT+1;
          IF TYPECNT > 2 THEN OUTPUT OUT2.OBC;
          ELSE OUTPUT TYPES;
     END;
*
    IF MORE THAN TWO OAC COURSES WERE TAKEN BY A STUDENT,
    DROP MOST RECENT OAC COURSE(S).
;
     ELSE IF COURSTYP='OAC' THEN DO;
          TYPECNT+1;
          IF TYPECNT > 2 THEN OUTPUT OUT3.OAC;
          ELSE OUTPUT TYPES;
     END;
*
 IF MORE THAN FOUR TC COURSES WERE TAKEN BY A STUDENT,
 DROP MOST RECENT TC COURSE(S).
;
     ELSE IF COURSTYP='TC' THEN DO;
          TYPECNT+1;
          IF TYPECNT > 4 THEN OUTPUT OUT4.TC;
          ELSE OUTPUT TYPES;
     END;
   PROC SORT DATA=TYPES OUT=TEMP3; BY CLASCODE COURSEAV;
*
   CALCULATE ARMY STANDARD SCORE BY CLASS NUMBER AND
   COUNT THE NUMBER OF STUDENTS PER CLASS.
;
DATA TEMP4 STDSCORE;
     SET TEMP3; BY CLASCODE COURSEAV;
     IF FIRST.CLASCODE THEN CLASSIZE=0;
     CLASSIZE+1;
     IF COURSEAV > 100 THEN COURSEAV=.;
     STDSCORE=COURSEAV;
     PROC STANDARD MEAN=100 STD=20 OUT=STDSCORE; BY CLASCODE;
```

Procedure #8--Continued

```
     VAR STDSCORE;
DATA TEMP5;
     SET STDSCORE; BY CLASCODE;
     KEEP CLASCODE;
     RETAIN FIRST LAST;
     IF FIRST.CLASCODE THEN FIRST=COURSEAV;
     IF LAST.CLASCODE THEN DO;
        LAST=COURSEAV;
        IF FIRST=LAST THEN OUTPUT;
     END;
*
   SET COURSE AVERAGE AND ARMY STANDARD SCORE TO MISSING IF
   ALL STUDENTS IN THE CLASS HAVE THE SAME COURSE AVERAGE.
;
DATA MERGE1;
     MERGE STDSCORE TEMP5(IN=A); BY CLASCODE;
     IF A THEN DO;
        STDSCORE=.;
        COURSEAV=.;
     END;
     PROC SORT DATA=MERGE1 OUT=MERGE1S; BY CLASCODE CLASSIZE;
 DATA COUNT;
      SET MERGE1S; BY CLASCODE;
      KEEP CLASCODE CLASSCNT;
      IF LAST.CLASCODE THEN DO;
         CLASSCNT=CLASSIZE;
         OUTPUT;
      END;
*
  ASSIGN CLASS COUNT TOTAL TO CLASS SIZE FIELD.
;
 DATA MERGE2;
      MERGE MERGE1S COUNT(IN=A); BY CLASCODE;
      IF A THEN CLASSIZE=CLASSCNT;
      PROC SORT DATA=MERGE2 OUT=MERGE2S; BY SSN;
*
  CREATE FINAL DATA BASE RECORD LAYOUT.
;
DATA OUT5.AIMS;
     SET MERGE2S; BY SSN;
     DROP SITECODE COURSECD CLASSYR CLASSNBR CLASSIZE RANK COURSEAV
          STDSCORE REPFLAG COURSTYP TYPECNT CLASCODE CLASSNUM RSSN
          MATCHFLG OMFFLAG COURSREP STUDTYPE CLASSCNT SSNTYPE
          OACCNT OBCCNT TCCNT;
     RETAIN
        OCSSITE '  '    OCSCODE '    '
        OCSYEAR '  '    OCSCLASS '   '
        OCSSIZE 0       OCSRANK '    '
        OCSAVRG 0       OCSSCOR 0
        OCSREP 0
        OBC1SITE '  '   OBC1CODE '    '
        OBC1YEAR '  '   OBC1CLAS '   '
```

Procedure #8--Continued

```
        OBC1SIZE 0        OBC1RANK '     '
        OBC1AVRG 0        OBC1SCOR 0
        OBC1REP 0
        OBC2SITE '   '    OBC2CODE '     '
        OBC2YEAR '   '    OBC2CLAS '    '
        OBC2SIZE 0        OBC2RANK '     '
        OBC2AVRG 0        OBC2SCOR 0
        OBC2REP 0
        OAC1SITE '   '    OAC1CODE '     '
        OAC1YEAR '   '    OAC1CLAS '    '
        OAC1SIZE 0        OAC1RANK '     '
        OAC1AVRG 0        OAC1SCOR 0
        OAC1REP 0
        OAC2SITE '   '    OAC2CODE '     '
        OAC2YEAR '   '    OAC2CLAS '    '
        OAC2SIZE 0        OAC2RANK '     '
        OAC2AVRG 0        OAC2SCOR 0
        OAC2REP 0
        TC1SITE '   '     TC1CODE '     '
        TC1YEAR '   '     TC1CLAS '    '
        TC1SIZE 0         TC1RANK '     '
        TC1AVRG 0         TC1SCOR 0
        TC1REP 0
        TC2SITE '   '     TC2CODE '     '
        TC2YEAR '   '     TC2CLAS '    '
        TC2SIZE 0         TC2RANK '     '
        TC2AVRG 0         TC2SCOR 0
        TC2REP 0
        TC3SITE '   '     TC3CODE '     '
        TC3YEAR '   '     TC3CLAS '    '
        TC3SIZE 0         TC3RANK '     '
        TC3AVRG 0         TC3SCOR 0
        TC3REP 0
        TC4SITE '   '     TC4CODE '     '
        TC4YEAR '   '     TC4CLAS '    '
        TC4SIZE 0         TC4RANK '     '
        TC4AVRG 0         TC4SCOR 0
        TC4REP 0 ;
    FORMAT OCSSITE $SITECOD.;
    FORMAT OCSCODE $COURSCD.;
    FORMAT OCSRANK $RANK.;
    FORMAT OCSREP REPFLAG.;
    FORMAT OBC1SITE $SITECOD.;
    FORMAT OBC1CODE $COURSCD.;
    FORMAT OBC1RANK $RANK.;
    FORMAT OBC1REP REPFLAG.;
    FORMAT OBC2SITE $SITECOD.;
    FORMAT OBC2CODE $COURSCD.;
    FORMAT OBC2RANK $RANK.;
    FORMAT OBC2REP REPFLAG.;
    FORMAT OAC1SITE $SITECOD.;
    FORMAT OAC1CODE $COURSCD.;
```

Procedure #8--Continued

```
      FORMAT OAC1RANK $RANK.;
      FORMAT OAC1REP REPFLAG.;
      FORMAT OAC2SITE $SITECOD.;
      FORMAT OAC2CODE $COURSCD.;
      FORMAT OAC2RANK $RANK.;
      FORMAT OAC2REP REPFLAG.;
      FORMAT TC1SITE $SITECOD.;
      FORMAT TC1CODE $COURSCD.;
      FORMAT TC1RANK $RANK.;
      FORMAT TC1REP REPFLAG.;
      FORMAT TC2SITE $SITECOD.;
      FORMAT TC2CODE $COURSCD.;
      FORMAT TC2RANK $RANK.;
      FORMAT TC2REP REPFLAG.;
      FORMAT TC3SITE $SITECOD.;
      FORMAT TC3CODE $COURSCD.;
      FORMAT TC3RANK $RANK.;
      FORMAT TC3REP REPFLAG.;
      FORMAT TC4SITE $SITECOD.;
      FORMAT TC4CODE $COURSCD.;
      FORMAT TC4RANK $RANK.;
      FORMAT TC4REP REPFLAG.;
      FORMAT OCSSCOR 5.0;
      FORMAT OBC1SCOR 5.0;
      FORMAT OBC2SCOR 5.0;
      FORMAT OAC1SCOR 5.0;
      FORMAT OAC2SCOR 5.0;
      FORMAT TC1SCOR 5.0;
      FORMAT TC2SCOR 5.0;
      FORMAT TC3SCOR 5.0;
      FORMAT TC4SCOR 5.0;
      IF FIRST.SSN THEN DO;
         OBCCNT=0;
         OACCNT=0;
         TCCNT=0;
         OCSSITE='  ';    OCSCODE='    ';
         OCSYEAR='  ';    OCSCLASS='   ';
         OCSSIZE=.;       OCSRANK='    ';
         OCSAVRG=.;       OCSSCOR=.;
         OCSREP=.;
         OBC1SITE='  ';   OBC1CODE='    ';
         OBC1YEAR='  ';   OBC1CLAS='   ';
         OBC1SIZE=.;      OBC1RANK='    ';
         OBC1AVRG=.;      OBC1SCOR=.;
         OBC1REP=.;
         OBC2SITE='  ';   OBC2CODE='    ';
         OBC2YEAR='  ';   OBC2CLAS='   ';
         OBC2SIZE=.;      OBC2RANK='    ';
         OBC2AVRG=.;      OBC2SCOR=.;
         OBC2REP=.;
         OAC1SITE='  ';   OAC1CODE='    ';
         OAC1YEAR='  ';   OAC1CLAS='   ';
```

Procedure #8--Continued

```
        OAC1SIZE=.;     OAC1RANK='    ';
        OAC1AVRG=.;     OAC1SCOR=.;
        OAC1REP=.;
        OAC2SITE='  ';  OAC2CODE='    ';
        OAC2YEAR='  ';  OAC2CLAS='   ';
        OAC2SIZE=.;     OAC2RANK='    ';
        OAC2AVRG=.;     OAC2SCOR=.;
        OAC2REP=.;
        TC1SITE='  ';   TC1CODE='    ';
        TC1YEAR='  ';   TC1CLAS='   ';
        TC1SIZE=.;      TC1RANK='    ';
        TC1AVRG=.;      TC1SCOR=.;
        TC1REP=.;
        TC2SITE='  ';   TC2CODE='    ';
        TC2YEAR='  ';   TC2CLAS='   ';
        TC2SIZE=.;      TC2RANK='    ';
        TC2AVRG=.;      TC2SCOR=.;
        TC2REP=.;
        TC3SITE='  ';   TC3CODE='    ';
        TC3YEAR='  ';   TC3CLAS='   ';
        TC3SIZE=.;      TC3RANK='    ';
        TC3AVRG=.;      TC3SCOR=.;
        TC3REP=.;
        TC4SITE='  ';   TC4CODE='    ';
        TC4YEAR='  ';   TC4CLAS='   ';
        TC4SIZE=.;      TC4RANK='    ';
        TC4AVRG=.;      TC4SCOR=.;
        TC4REP=.;
     END;
*
    RETAIN ONE OCS COURSE PER STUDENT.
;
     IF COURSTYP='OCS' THEN DO;
          OCSSITE=SITECODE;
          OCSCODE=COURSECD;
          OCSYEAR=CLASSYR;
          OCSCLASS=CLASSNBR;
          OCSSIZE=CLASSIZE;
          OCSRANK=RANK;
          OCSAVRG=COURSEAV;
          OCSSCOR=STDSCORE;
          OCSREP=REPFLAG;
      END;
*
    RETAIN TWO OBC COURSES PER STUDENT.
;
        ELSE IF COURSTYP='OBC' THEN DO;
             OBCCNT+1;
             IF OBCCNT=1 THEN DO;
                OBC1SITE=SITECODE;
                OBC1CODE=COURSECD;
                OBC1YEAR=CLASSYR;
```

Procedure #8--Continued

```
                OBC1CLAS=CLASSNBR;
                OBC1SIZE=CLASSIZE;
                OBC1RANK=RANK;
                OBC1AVRG=COURSEAV;
                OBC1SCOR=STDSCORE;
                OBC1REP=REPFLAG;
              END;
                ELSE IF OBCCNT=2 THEN DO;
                     OBC2SITE=SITECODE;
                     OBC2CODE=COURSECD;
                     OBC2YEAR=CLASSYR;
                     OBC2CLAS=CLASSNBR;
                     OBC2SIZE=CLASSIZE;
                     OBC2RANK=RANK;
                     OBC2AVRG=COURSEAV;
                     OBC2SCOR=STDSCORE;
                     OBC2REP=REPFLAG;
                END;
        END;
*
    RETAIN TWO OAC COURSES PER STUDENT.
;
          ELSE IF COURSTYP='OAC' THEN DO;
               OACCNT+1;
               IF OACCNT=1 THEN DO;
                  OAC1SITE=SITECODE;
                  OAC1CODE=COURSECD;
                  OAC1YEAR=CLASSYR;
                  OAC1CLAS=CLASSNBR;
                  OAC1SIZE=CLASSIZE;
                  OAC1RANK=RANK;
                  OAC1AVRG=COURSEAV;
                  OAC1SCOR=STDSCORE;
                  OAC1REP=REPFLAG;
               END;
                 ELSE IF OACCNT=2 THEN DO;
                      OAC2SITE=SITECODE;
                      OAC2CODE=COURSECD;
                      OAC2YEAR=CLASSYR;
                      OAC2CLAS=CLASSNBR;
                      OAC2SIZE=CLASSIZE;
                     OAC2RANK=RANK;
                      OAC2AVRG=COURSEAV;
                      OAC2SCOR=STDSCORE;
                      OAC2REP=REPFLAG;
                 END;
          END;
*
    RETAIN FOUR TC COURSES PER STUDENT.
;
            ELSE IF COURSTYP='TC' THEN DO;
               TCCNT+1;
```

Procedure #8--Continued

```
                    IF TCCNT=1 THEN DO;
                       TC1SITE=SITECODE;
                       TC1CODE=COURSECD;
                       TC1YEAR=CLASSYR;
                       TC1CLAS=CLASSNBR;
                       TC1SIZE=CLASSIZE;
                       TC1RANK=RANK;
                       TC1AVRG=COURSEAV;
                       TC1SCOR=STDSCORE;
                       TC1REP=REPFLAG;
                    END;
                      ELSE IF TCCNT=2 THEN DO;
                           TC2SITE=SITECODE;
                           TC2CODE=COURSECD;
                           TC2YEAR=CLASSYR;
                           TC2CLAS=CLASSNBR;
                           TC2SIZE=CLASSIZE;
                           TC2RANK=RANK;
                           TC2AVRG=COURSEAV;
                           TC2SCOR=STDSCORE;
                           TC2REP=REPFLAG;
                      END;
                        ELSE IF TCCNT=3 THEN DO;
                             TC3SITE=SITECODE;
                             TC3CODE=COURSECD;
                             TC3YEAR=CLASSYR;
                             TC3CLAS=CLASSNBR;
                             TC3SIZE=CLASSIZE;
                             TC3RANK=RANK;
                             TC3AVRG=COURSEAV;
                             TC3SCOR=STDSCORE;
                             TC3REP=REPFLAG;
                        END;
                          ELSE IF TCCNT=4 THEN DO;
                               TC4SITE=SITECODE;
                               TC4CODE=COURSECD;
                               TC4YEAR=CLASSYR;
                               TC4CLAS=CLASSNBR;
                               TC4SIZE=CLASSIZE;
                               TC4RANK=RANK;
                               TC4AVRG=COURSEAV;
                               TC4SCOR=STDSCORE;
                               TC4REP=REPFLAG;
                          END;
          END;
LABEL SSN='SOCIAL SECURITY NUMBER'
       OCSSITE = 'OCS COURSE SITE'
       OCSCODE = 'OCS COURSE CODE'
       OCSYEAR = 'OCS CLASS YEAR'
       OCSCLASS = 'OCS CLASS NUMBER'
       OCSSIZE = 'NUMBER OF CASES IN OCS COURSE'
       OCSRANK = 'RANK AT TIME OF OCS COURSE'
```

Procedure #8--Continued

```
OCSAVRG = 'OCS COURSE FINAL GRADE'
OCSSCOR = 'ARMY STD SCORE OF OCS CLASS'
OCSREP = 'REPEAT FLAG FOR OCS COURSE'
OBC1SITE = 'OBC1 COURSE SITE'
OBC1CODE = 'OBC1 COURSE CODE'
OBC1YEAR = 'OBC1 CLASS YEAR'
OBC1CLAS = 'OBC1 CLASS NUMBER'
OBC1SIZE = 'NUMBER OF CASES IN OBC1 COURSE'
OBC1RANK = 'RANK AT TIME OF OBC1 COURSE'
OBC1AVRG = 'OBC1 COURSE FINAL GRADE'
OBC1SCOR = 'ARMY STD SCORE OF OBC1 CLASS'
OBC1REP = 'REPEAT FLAG FOR OBC1 COURSE'
OCSREP = 'REPEAT FLAG FOR OCS COURSE'
OBC2SITE = 'OBC2 COURSE SITE'
OBC2CODE = 'OBC2 COURSE CODE'
OBC2YEAR = 'OBC2 CLASS YEAR'
OBC2CLAS = 'OBC2 CLASS NUMBER'
OBC2SIZE = 'NUMBER OF CASES IN OBC2 COURSE'
OBC2RANK = 'RANK AT TIME OF OBC2 COURSE'
OBC2AVRG = 'OBC2 COURSE FINAL GRADE'
OBC2SCOR = 'ARMY STD SCORE OF OBC2 CLASS'
OBC2REP = 'REPEAT FLAG FOR OBC2 COURSE'
OAC1SITE = 'OAC1 COURSE SITE'
OAC1CODE = 'OAC1 COURSE CODE'
OAC1YEAR = 'OAC1 CLASS YEAR'
OAC1CLAS = 'OAC1 CLASS NUMBER'
OAC1SIZE = 'NUMBER OF CASES IN OAC1 COURSE'
OAC1RANK = 'RANK AT TIME OF OAC1 COURSE'
OAC1AVRG = 'OAC1 COURSE FINAL GRADE'
OAC1SCOR = 'ARMY STD SCORE OF OAC1 CLASS'
OAC1REP = 'REPEAT FLAG FOR OAC1 COURSE'
OCSREP = 'REPEAT FLAG FOR OCS COURSE'
OAC2SITE = 'OAC2 COURSE SITE'
OAC2CODE = 'OAC2 COURSE CODE'
OAC2YEAR = 'OAC2 CLASS YEAR'
OAC2CLAS = 'OAC2 CLASS NUMBER'
OAC2SIZE = 'NUMBER OF CASES IN OAC2 COURSE'
OAC2RANK = 'RANK AT TIME OF OAC2 COURSE'
OAC2AVRG = 'OAC2 COURSE FINAL GRADE'
OAC2SCOR = 'ARMY STD SCORE OF OAC2 CLASS'
OAC2REP = 'REPEAT FLAG FOR OAC2 COURSE'
TC1SITE = 'TC1 COURSE SITE'
TC1CODE = 'TC1 COURSE CODE'
TC1YEAR = 'TC1 CLASS YEAR'
TC1CLAS = 'TC1 CLASS NUMBER'
TC1SIZE = 'NUMBER OF CASES IN TC1 COURSE'
TC1RANK = 'RANK AT TIME OF TC1 COURSE'
TC1AVRG = 'TC1 COURSE FINAL GRADE'
TC1SCOR = 'ARMY STD SCORE OF TC1 CLASS'
TC1REP = 'REPEAT FLAG FOR TC1 COURSE'
TC2SITE = 'TC2 COURSE SITE'
TC2CODE = 'TC2 COURSE CODE'
```

Procedure #8--Continued

```
        TC2YEAR = 'TC2 CLASS YEAR'
        TC2CLAS = 'TC2 CLASS NUMBER'
        TC2SIZE = 'NUMBER OF CASES IN TC2 COURSE'
        TC2RANK = 'RANK AT TIME OF TC2 COURSE'
        TC2AVRG = 'TC2 COURSE FINAL GRADE'
        TC2SCOR = 'ARMY STD SCORE OF TC2 CLASS'
        TC2REP = 'REPEAT FLAG FOR TC2 COURSE'
        TC3SITE = 'TC3 COURSE SITE'
        TC3CODE = 'TC3 COURSE CODE'
        TC3YEAR = 'TC3 CLASS YEAR'
        TC3CLAS = 'TC3 CLASS NUMBER'
        TC3SIZE = 'NUMBER OF CASES IN TC3 COURSE'
        TC3RANK = 'RANK AT TIME OF TC3 COURSE'
        TC3AVRG = 'TC3 COURSE FINAL GRADE'
        TC3SCOR = 'ARMY STD SCORE OF TC3 CLASS'
        TC3REP = 'REPEAT FLAG FOR TC3 COURSE'
        TC4SITE = 'TC4 COURSE SITE'
        TC4CODE = 'TC4 COURSE CODE'
        TC4YEAR = 'TC4 CLASS YEAR'
        TC4CLAS = 'TC4 CLASS NUMBER'
        TC4SIZE = 'NUMBER OF CASES IN TC4 COURSE'
        TC4RANK = 'RANK AT TIME OF TC4 COURSE'
        TC4AVRG = 'TC4 COURSE FINAL GRADE'
        TC4SCOR = 'ARMY STD SCORE OF TC4 CLASS'
        TC4REP = 'REPEAT FLAG FOR TC4 COURSE';
    IF LAST.SSN THEN OUTPUT OUT5.AIMS;
    PROC FREQ;
    TABLES OCSSITE OCSCODE OCSYEAR OCSCLASS OCSSIZE
    OCSRANK OCSAVRG OCSSCOR OCSREP
    OBC1SITE OBC1CODE OBC1YEAR OBC1CLAS OBC1SIZE
    OBC1RANK OBC1AVRG OBC1SCOR OBC1REP
    OBC2SITE OBC2CODE OBC2YEAR OBC2CLAS OBC2SIZE
    OBC2RANK OBC2AVRG OBC2SCOR OBC2REP
    OAC1SITE OAC1CODE OAC1YEAR OAC1CLAS OAC1SIZE
    OAC1RANK OAC1AVRG OAC1SCOR OAC1REP
    OAC2SITE OAC2CODE OAC2YEAR OAC2CLAS OAC2SIZE
    OAC2RANK OAC2AVRG OAC2SCOR OAC2REP
    TC1SITE TC1CODE TC1YEAR TC1CLAS TC1SIZE
    TC1RANK TC1AVRG TC1SCOR TC1REP
    TC2SITE TC2CODE TC2YEAR TC2CLAS TC2SIZE
    TC2RANK TC2AVRG TC2SCOR TC2REP
    TC3SITE TC3CODE TC3YEAR TC3CLAS TC3SIZE
    TC3RANK TC3AVRG TC3SCOR TC3REP
    TC4SITE TC4CODE TC4YEAR TC4CLAS TC4SIZE
    TC4RANK TC4AVRG TC4SCOR TC4REP;
    TITLE 'AIMS DATA BASE';
//
```

**Procedure #9 - Encrypt Social Security Number**

**Delivered to Contracting Officer Representative**

Procedure #10 - Enter Formats In OLRDB Format Library

```
//EPXFMTS JOB (WTFF,748,A),RAMSEY
/*UNNUMBERED
/*  SAS.OLRDB.FORMATS.APPEND3 ON FILE45
//PROCLIB DD DSN=ZABCRUN.PROCLIB,DISP=SHR
//STEP1 EXEC SAS
//SASLIB DD DSN=WRZ1KFD.OLRDB.FORMATS,DISP=(OLD,KEEP)
//SYSIN DD *
 PROC FORMAT DDNAME=SASLIB;
 VALUE  $SITECOD
           AB = 'ABERDEEN PROV GRND'
           BH = 'FT. BEN HARRISON'
           BL = 'FT. BLISS'
           BN = 'FT. BENNING'
           BV = 'FT. BELVOIR'
           GO = 'FT. GORDON'
           HU = 'FT. HUACHUCA'
           KN = 'FT. KNOX'
           LE = 'FT. LEE'
           MC = 'FT. MCCLELLAN'
           SI = 'FT. SILL';
 VALUE  $COURSCD
           '133Z' = 'OFF CANDIDAT SCH'
           '134X' = 'INFTRY OFF BASIC'
           '137C' = 'INFTRY OFF ADV'
           '139B' = 'INFTRY OFF BASIC'
           '13RC' = 'INF OFF ADV RES COMP'
           '132Z' = 'IMMATRL OFF CANDIDATE'
           '133G' = 'OFF CANDIDATE RC'
           '135F' = 'INFANTRY PRECOMMAND'
           '136C' = 'INFANTRY OFF ADV'
           '136M' = 'INFANTRY OFF MAINT'
           '07AL' = 'ECH ABV CRP PLAT LDR'
           '07AO' = 'CORP COM OPER OFF'
           '07AP' = 'ECH ABV CRP OP OFF'
           '07AS' = 'SIG OFF BASIC'
           '07AT' = 'SIG OFF ADV'
           '07AU' = 'SIG OFF BAS RES COMP'
           '07AV' = 'SIG OFF ADV RES COMP'
           '07AB' = 'SIGNAL PRECOMMAND'
           '18AE' = 'MI OAC ADV TACT SRCE'
           '18AG' = 'MI OFF ADV IMGY EXPL'
           '18AH' = 'MI OFF ADV ELEC WF/CRP'
           '18AI' = 'MI OAC CNTERINTEL'
           '18BB' = 'INTELL OFF BASIC'
           '0374' = 'CHEM OFF ADSPEC'
           '03CA' = 'CHEM OFF ADV'
           '03CB' = 'CHEM OFF BASIC'
           '03R4' = 'RC CHEM OFF ADV PHASE IV'
           '03R6' = 'RC CHEM OFF RESERVE PHASE VI'
           '040A' = 'MILT POL OFF ADV'
           '040B' = 'MILI POL OFF BAS'
           '03LR' = 'CHEM OFF SR STAFF'
```

Procedure #10--Continued

```
'030L' = 'SR COMDR/CHEM OFF'
'030R' = 'CHEM FLD GRADE OFF'
'04BR' = 'M POLICE OFF BAS'
'04PC' = 'M POLICE PRECMD'
'08AC' = 'ORDNCE OFF ADV'
'08BB' = 'ORD MT MGR OFF BAS'
'08A6' = 'ORD OFF ADV FLD MAINT'
'08A7' = 'ORD OFF ADV MAINT MGR'
'08AR' = 'ORD OFFICER ADV'
'16A8' = 'ENGR OFF ADV'
'16AA' = 'EOAC RES COMP COM PH'
'16AD' = 'ATMC DEM MUN OFF'
'16AO' = 'ENGR OFF ADV'
'16AR' = 'ENGR OFF ADV CRS RES'
'16BO' = 'ENGR OFF BASIC'
'16BR' = 'ENGR OFF BAS RES COMP'
'178A' = 'HWK MISL STF OFF'
'17CU' = 'CHAP VUL OFF QUAL'
'17DK' = 'HAWK OFFICER'
'17EQ' = 'PATR AIR DEF OFF'
'17ER' = 'PATR AIR DEF OFF'
'17FJ' = 'ADA OFF ADV'
'17FK' = 'OFF ADV FOL TRAK HWK'
'17FL' = 'OFF ADV FOL TRAK SHD'
'17FM' = 'OFF ADV FOL TRAK PATR'
'17FW' = 'ADA OFF BASIC'
'1717' = 'AIR DEF PRECOMMAND'
'172G' = 'ADA OFF TACTIC RC'
'17EV' = 'PATR AIR DEF OFF'
'17FV' = 'AIR DEF OFF BAS'
'17NK' = 'NIKE HERCULES OFF'
'1003' = 'ARM OFF BAS RES COMP'
'1004' = 'ARMOR OFF ADV'
'1008' = 'JR OFF MAINTNCE'
'1078' = 'ARM OFF BAS SNGL TRAK'
'1005' = 'ARMOR OFF ADV RC'
'1007' = 'SR OFF PREVT LOG'
'1010' = 'ARMOR PRECOMMAND'
'1081' = 'SCOUT PLATOON LDR'
'06L4' = 'LOGISTICS OFF S4'
'06LB' = 'QUARTMST OFF BAS'
'06LN' = 'QUARTMST OFF ADV'
'06LC' = 'COMBAT SVC PRECMD'
'06LJ' = 'JUDGE GEN OFF BAS'
'121A' = 'ADJ GEN OFF ADV'
'121P' = 'ADJ GEN OFF BAS'
'121Q' = 'FINANCE OFF BAS'
'121W' = 'BAT S1 RES MGMT OFF'
'121B' = 'FINANCE OFF ADV'
'121K' = 'ADJ GENERAL PRECOMMAND'
'121N' = 'ADJ GEN OFF BASIC RC'
'124H' = 'FINANCE PRECOMMAND'
```

Procedure #10--Continued

```
            '0101' = 'ARTILLRY OFF ADV'
            '0102' = 'ARTILLRY OFF BAS'
            '0104' = 'FA PRECOMMAND'
            '0105' = 'FA OFFICER ADV PREP'
            '0106' = 'ARTILLRY OFF ADV RC'
            '0107' = 'FA TARGET ACQ OFF'
            '0108' = 'PERSHING II OFF'
            '0109' = 'FA OFF BASIC RC'
            '0111' = 'COMM ELEC STAFF OFF';
 VALUE   $RANK
            '1LT' = '1ST LIEUTENANT'
            '2LT' = '2ND LIEUTENANT'
            'CPT' = 'CAPTAIN'
            'MAJ' = 'MAJOR'
            'LTC' = 'LT COLONEL'
            'COL' = 'COLONEL'
            'B G' = 'BRIGADIER GENERAL'
            'M G' = 'MAJOR GENERAL'
            'LTG' = 'LT GENERAL'
            'GEN' = 'GENERAL'
            'G A' = 'GEN OF THE ARMY'
            'PV1' = 'PRIVATE'
            'PV2' = 'PRIVATE'
           'PVT1' = 'PRIVATE'
           'PVT2' = 'PRIVATE'
            'PFC' = 'PRIVATE 1ST CLASS'
            'CPL' = 'CORPORAL'
            'SGT' = 'SERGEANT'
            'SFC' = 'SGT 1ST CLASS'
            'SSG' = 'STAFF SERGEANT'
            'MSG' = 'MASTER SERGEANT'
            'SGM' = 'SERGEANT MAJOR'
            'CSM' = 'CMD SERGEANT MAJOR'
            'W01' = 'WARRANT OFF 1'
            'CW2' = 'CHIEF WARRANT 2'
            'CW3' = 'CHIEF WARRANT 3'
            'CW4' = 'CHIEF WARRANT 4'
            'SP4' = 'SPECIALIST 4'
            'SP5' = 'SPECIALIST 5'
            'SP6' = 'SPECIALIST 6'
            'SP7' = 'SPECIALIST 7';
 VALUE   REPFLAG
             1 = 'COURS NOT REPEATED'
             2 = 'COURSE REPEATED';
//
```